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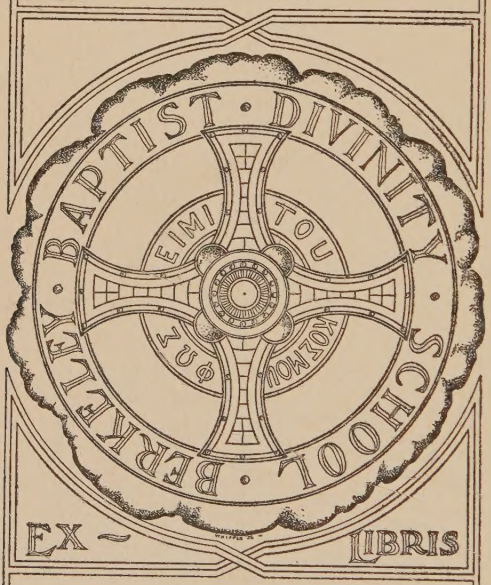

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A THEORY OF DIRECT REALISM

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A THEORY OF DIRECT REALISM

AND THE RELATION OF REALISM TO IDEALISM

BY

J. E. TURNER, M.A., PH.D.

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To

ALEXANDER MAIR, M.A.

PROFESSOR OF PHILOSOPHY IN THE UNIVERSITY OF LIVERPOOL

AS AN INADEQUATE EXPRESSION OF THE AUTHOR'S

INDEBTEDNESS FOR GENEROUS ASSISTANCE

AND UNFAILING INTEREST

PREFACE

THE first part of this volume is an attempt to formulate a realistic theory of Perception and of the physical world which is more realist than any of the current realisms with which I am acquainted, with the exception, it may be, of Dr. Alexander's position. Subject to this qualification, it appears to me that all recent systems concede far more than is logically necessary to either subjectivism, phenomenalism, or noumenalism. In other words, that marked tendency towards Realism which is so characteristic of twentieth-century speculation has not yet, in my opinion, gone far enough in its approach towards the naïve realism of ordinary unreflective experience. The fundamental reason for this is to be found in the failure to elucidate the logical implications of the course of our ordinary experience, especially in its earliest phases. The details of these, of course, are inevitably forgotten by everyone; and yet they lead by a perfectly natural process to the naïve realism of the plain man. But almost universally this unreflective attitude is regarded, from the very outset of the whole inquiry, as being merely automatic, "instinctive" or "intuitional" in the bad sense of these terms, and as totally devoid therefore of rational justification; it is looked upon, in Hume's familiar phrase, as merely the result of a "blind and powerful instinct of nature".* The further consequence of this initial orientation to the entire problem is the conclusion that every theoretical approximation to naïve realism must be carefully guarded against because it is inherently fallacious.

Another fertile source of confusion lies in the epistemologist's omission to recognize that the naïve realist's distinction between reality and appearance, throughout all

* *Inquiry Concerning Human Understanding*, sect. xii.

the intricacies of their interrelation, is thoroughly pragmatic and not in the least degree speculative.* But the philosophic theorist—quite naturally—at once transforms this essentially practical distinction into his own philosophical one between various modes of being or kinds of existence ; and in this way the issue becomes still more distorted, and therefore misjudged from the very outset.

This method and general attitude appear to me to be fundamentally erroneous, and my own procedure has followed the reverse course. For the naïve realist is undoubtedly—and blissfully—unconscious of the intricate problems which confront the psychologist and the epistemologist ; but we cannot therefore at once conclude that his standpoint must either be totally repudiated or radically transformed. On the contrary, there seem to me to be substantial grounds within the very conditions of unreflective experience itself for the ordinary man's beliefs.

The plain man, in other words, is right, but without knowing *why* he is right ; he has taken a short cut to his summary conclusions, and his naïve realism is always therefore a truncated or foreshortened realism. But it is possible, I believe, to undertake a systematic analysis of the conditions which actually determine the course of his experience ; and when these are properly formulated they enable what I have just called the " truncated realism " of our philosophical innocence to be given its true and logical expansion. Treated in this manner, the results ultimately constitute the basis of a specific theory of sense-perception and of physical reality which, principally for purposes of convenience in comparing it with its predecessors, I have called Direct Realism.

But the term " Direct " is intended to imply further the complete absence of any representative or noumenalist factors in the process and object of perception. Despite the complexity of perceptual activity, in other words, the mind or *ego* is thereby maintained in immediate contact and relation with the external material world as this

* On the other hand the standpoint of Pragmatism itself is too wide ; it would not discriminate between the naïve and the theoretical points of view.

actually exists. This, however, does not mean that the full nature of this world is *exhaustively* apprehended in sense-perception, but only that so far as it carries us, and subject to some theory of "appearances", perception is in principle veridical.

I do not think this task has hitherto been attempted, and so far as this is the case my method is new. The content of *mature* experience and the nature of its objects have repeatedly been dealt with, while the fundamentally important and formative period of early consciousness has been ignored; and this omission has seriously detracted from the value of the results as represented in current realistic theories.

I believe further that my analysis of the causational aspects of perception (in Chapter XIII) follows a course that has not previously been adopted, and which yields substantial support to my general realistic standpoint.

The second part of the volume is an exposition of Hegelian Idealism, but only as this bears upon the current realistic controversy. In this respect the position of Hegel himself and of several British Hegelians has been radically misapprehended, with consequences that have seriously affected the recent course of discussion and which, therefore, are of paramount importance for the future development of Physical Realism.

It will doubtless be felt that there are many philosophic problems of far higher importance than those with which I have here attempted to deal; and with this opinion I am in entire agreement. But be this as it may, the realistic issue cannot be ignored nor evaded, the more particularly in view of the increasingly close connections which will undoubtedly arise between the philosophy and the science of the future. From this standpoint the problem is one of growing urgency. For science is rapidly discarding both its aloofness from philosophy in general and the phenomenalism and noumenalism which banished the real into the Limbo either of the unknown or of the *Ding-an-sich*, that have characterized its earlier stages; *

* "Noumenalism" has various meanings. I use it in the sense indicated below, p. 22.

under its demand for some consistent theory of the nature of the physical universe it must merge with philosophy.

I may add that my entire theory was elaborated in complete independence of Professor Alexander's work on these problems, although it will be seen that my own final position, regarded in its entirety, is closely akin to his. Under the circumstances it is perhaps advisable to indicate the main points of difference. These are to be found first in my endeavour to trace the detailed development of naïve realism from its roots in the earliest phases of consciousness, whereas Professor Alexander's analysis deals only with the nature of our matured experience. Secondly, my theory of appearances differs in several important respects from his, and I have also suggested an alternative scheme of their classification (Chapter VII); and finally, I have not been able to accept his view of the nature of images (Chapter XV). A subordinate feature concerns his treatment of the character of knowledge in its relation to perception.

The Dedication speaks for itself; but the volume in its present form owes very much to the skilled and sympathetic editorial supervision of Dr. Muirhead, the General Editor of the Series. I should also like to take this opportunity of expressing my thanks to Professor Pringle-Pattison for many valuable suggestions; also to my friends Mr. G. C. Field, of the University of Liverpool, Dr. Olaf Stapledon, Mr. H. H. Price and Mr. W. P. Blevin for acute criticism which disclosed weaknesses in the general argument; and to Miss G. Baddeley and my son for material assistance in press preparation, together with the publishers and printers for the way in which their part of the undertaking has been performed.

Throughout the text footnotes are indicated by signs (*, †, *etc.*) and the references, which appear at the end of each chapter, by numbers.

J. E. TURNER.

LIVERPOOL,
April, 1925.

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A Theory of Direct Realism

CHAPTER I

INTRODUCTION. SUGGESTIONS ON TERMINOLOGY

1. "REALISM in modern philosophy", says Professor Laird, "is born in controversy, and its foe is idealism in some form." * But the recent development of realistic theories of knowledge and of the nature of physical reality has been marred to a great degree by a failure to apprehend the fundamental principles of that phase of idealism which is best described as Hegelian. Exactly what "Hegelian idealism" means must, of course, always remain a matter of controversy, for the conflict between the various post-Hegelian schools can neither be ignored nor reconciled. "Realism and Idealism", as Dr. Bosanquet has observed, "are traditional battle-cries rather than names of precision"; † and in spite of a century's changes in meaning, Hegel's own utterances are still of equal interest. "Such expressions as subjectivity and objectivity, reality and ideality", he maintained, "are simply vague abstractions; the contrast of idealistic and realistic philosophy is of no importance." ‡ My own position therefore can only be defined as I proceed. But in two respects, in my opinion, the course of discussion has been perverted. Criticism has been directed against "idealistic" views which were advocated

* *A Study in Realism*, p. 2.

† *The Meeting of Extremes in Contemporary Philosophy*, p. v. *Cf.* Alexander, *Space, Time and Deity*, vol. i. p. 7: "I should be glad (to) get rid of them altogether."

‡ *Philosophy of Religion*, vol. iii. p. 169; *Logic* (Wallace), p. 413.

neither by Hegel himself nor by some of his successors; and as a consequence the support which modern realists might have obtained from these writers has remained altogether unappreciated. Current realism in short has failed very largely to orientate itself truly to one of the greatest historic schools of philosophy; in this regard, as in others, we shall find ground for agreeing with Lord Haldane that "no philosophical doctrine has been more misrepresented than has been Hegelianism in current literature".*

This unfortunate result is to be accounted for by the very vigour of the realistic attack upon every form of subjectivism. "To get rid of subjectivism", the new realists have maintained, is "the central preeminent issue; new realism is, broadly speaking, a return to natural realism."† This onslaught upon subjectivism has then become diverted towards idealism; but mainly, if not solely, it is extremely important to notice, towards Berkeleian idealism. ‡

"Berkeley", affirms Professor Perry, "asserts that all existence may adequately be comprehended under the knower and his ideas; in this assertion modern idealism first sees the light . . . *being is dependent on the knowing of it* (is) the cardinal principle of modern idealism." § Berkeley himself, as is well known, always denied that his own position committed him to subjectivism. Philonous, like the new realists, adheres "to the plain dictates of nature and common sense", and so affirms himself a thorough realist; "I am of a vulgar cast; the real things are those very things I see and feel". ‖ So that even if the highly questionable suggestion be admitted that all modern idealism finds its original source in Berkeley, this of itself is not sufficient to establish the identity between idealism and subjectivism. And when, further, Hegel's philosophy is affiliated to Berkeley's—"the theory (of) Berkeley is

* *The Reign of Relativity*, p. 344. *Cf.* Reyburn, *Ethical Theory of Hegel*, p. vii.

† *New Realism*, p. 10.

‡ "Subjectivism, renewed and fortified under the name of idealism." *Ibid.*, p. 11. *Cf.* Russell, *Analysis of Mind*, p. 20.

§ *Present Philosophical Tendencies*, pp. 122, 114.

‖ *Works* (Bohn), vol. i. pp. 302, 363.

essentially the same as that (of) Fichte and Hegel . . . *to be is to be either knower or known*" *—it will become obvious that inasmuch as certain fundamental qualifications of the principle have been ignored, we have here an outstanding instance of that misrepresentation of Hegelianism which has just been alluded to in the words of Lord Haldane.

But before endeavouring to establish a truer relation between current realism and its predecessors a critical survey of its main principles must be attempted; and for this the best starting-point is provided by Dr. Stout's discussion of Professor Alexander's theory of sense-perception which appeared in a recent volume of *Mind*, and which has the advantage that both thinkers are realists. "According to Alexander", says Stout, "all knowledge is the direct revelation to the knowing mind of something which exists independently of being known. This is a position which I myself accept"; † and it is further a position fundamentally characteristic of both the neo-realists and the critical realists of America. "New realism insists that things are *independent*"; "*so far as* perception gives us accurate knowledge, it does so by causing the actual characteristics of objects to appear to us".‡ The principle, of course, is not so "new" as is often imagined; for Reid regarded perception as essentially involving a "definite judgment of existence (carrying) with it the idea of an object —a real world of which we have an irresistible and necessary belief, or an immediate perception". § Still more explicitly, though possibly in a more unexpected quarter, "the object . . . is independent, I have not made it, it did not wait for me in order to exist, and it remains although I go away from it".‖

2. At this point, however, the common ground of agreement ceases. "I disagree", continues Stout, "with (Alexander's) application of (the principle) to sensa and images. . . . He asserts and I deny that sensa are identical with

* Perry, *Ibid.*, p. 134; *cf.* Holt, *Concept of Consciousness*, p. 91.
† Vol. xxxi. p. 386.
‡ Perry, *op. cit. ante*, p. 308. *Essays on Critical Realism*, p. 24.
§ Seth, *Scottish Philosophy*, p. 104. *Cf.* below, pp. 33, 124, 125.
‖ Hegel, *Philosophy of Religion*, vol. i. p. 107.

perceived features of physical existence." But just here there arise several extremely important questions of terminology—a matter which has already been emphasized by the American new realists.* The issue turns, obviously, on the nature and function of " sensa " ; or to revert to earlier usage, of " sense-content " or sense-data. These terms however are seriously misleading, and much of the current obscurity of our analysis is due to the implicit associations which they all alike share. For they all imply —merely on the score of earlier theories of " sense " and " sensation "—that sense-contents (or sense-data, or sensa), necessarily partake in greater or less degree of those characters which properly pertain to sensation truly so-called; (1) that they are, in short, in some measure " subjective "—depend in part for their own existence and character directly upon the existence and activity of the percipient observer or experient, either physiologically, or psychologically, or both.(2)

Thus from the very outset there is introduced into the whole inquiry a distinct and inherent tendency towards subjectivism which no assertion, however explicit it may be, of the neutral character of these three terms is sufficient to remove, and against which—either consciously or unconsciously—realism is forced, wholly unjustifiably, continually to contend; modern realists, that is to say, are always subjected to an unfair handicap. This holds true *e.g.* of Mr. Bradley's repeated insistence on the *rôle* of feeling, true though his contention undoubtedly is in principle; as also, though to a less degree, of Dr. Bosanquet's treatment of the relation between judgment and reality in the final chapter of his *Logic*; while the analogous difficulties which attend the term " experience " are notorious.(3)

That this initial difficulty is an actual and serious one is shown by Perry's use of the term " mental content ". Perry's own standpoint is, of course, thoroughly realistic; and yet, simply because of the cumulative authority of custom and weighty opinion, his treatment leaves the impression that perceived realities become somehow, and

* *New Realism*, p. 21.

to some degree, transformed into elements or factors of the percipient's consciousness in its purely subjective and individual aspects. For in discussing the question "how parts of nature become contents of mind" he maintains that "a sound listened to or heard is, by virtue of that action, mental content . . . when things are known they *are* ideas of the mind, enter *directly into* the mind, and become ideas. Ideas are only things in a certain relation; things, in respect of being known, are ideas".(4) Now let this be accepted without further comment—let us grant that the terms "mental" and "ideas" have been, consistently with the realist's resolve "to get rid of subjectivism", purged of all their innate subjectivist significance. We then find further that perceived things—sounds heard, or objects seen or handled—while they are "mental contents"—while they "derive their mental character from that which *acts on them*"—are not the only forms of "mental content"—not the only kind of "ideas". For "abstractions" are also and equally "mental contents". "When I am thinking abstractions, the contents of my mind . . . that they are my contents means that they are somehow bound up with the history of my nervous system." *

The same feature is still more prominent in the case of the critical realist Dr. Strong. Instead of "sensa" he employs "sensible appearances"; and these "are not existences, but only sensations *in so far as they are used as signs* . . . the mere sensation of light, a thing that is a state of yourself in the same way that a pain is".(5) And thus, while the realist gets "rid of subjectivism" with one hand, he tends to replace it with the other. For while perceived things are "mental contents"—while they become ideas—all the "abstractions" which I think are also, and equally, mental contents; and the inevitable result, despite all the forcible arguments with which Perry supports his realism, is that the reader finds his previously acquired impression confirmed—that to be, or to become, a "mental content" means in some degree to be part of that subjective content which is private and peculiar to the individual mind

* *Ibid.*, pp. 279, 297.

as individual, in the same way that conceived " abstractions " are. The essential distinction between *logical* objectivity and *perceptual* objectivity has here been omitted by Perry, and can but rarely be supplied by the reader on his own account; and even if it were insisted upon as it should be, it would still remain true that logical objectivity is one thing, and perceptual objectivity quite another. If this difficulty figures so prominently in the treatment of professed realists it must be a still greater source of confusion in the hands of antirealists. I would therefore suggest, and I shall myself adopt, the use of the term " sensed content " instead of either sensum, sense-datum or sense-content. The alteration, I am fully aware, may seem too trivial to merit serious consideration; but we may recall the part once played in the history of theological controversy by the insertion or omission of the letter *ι*—a subject which Gibbon deemed worthy of his satire.(6)

" Sensed content " commits us to nothing further, at the outset, beyond the patent fact that this content is apprehended—or, more precisely, perceived—essentially by means of our sense organs—their operation constitutes one indispensable factor in the whole process of awareness.* All further questions therefore—the character of the complete process and the other factors involved therein—the nature of the content in itself beyond the bare fact that it is " sensed "— are left entirely open, and can now be approached without any subjectivist presuppositions whatever. Rather, indeed, the contrary. For that things are " sensed " (with the meaning above) and are also physically real, seems patent to the most hasty and superficial observation—seems a commonplace of all experience;(7) and thus our inquiry retains the " realistic " attitude of the ordinary observer. The nature of " sense ", on the other hand, is a difficult psychological problem that has beset the whole history of philosophy. I may add that " content " here implies nothing spatial; its meaning rather approaches

* From this point of view hallucinatory sense-apparitions are also sensed content; *cf.* further p. 83 below.

that of content of an argument or a poem ; it is the content of one mode of experience.

Allied with " sense " is " sensation " ; and it would lead to increased clarity to employ this term to denote the conscious *process* or *activity* alone, as distinct from all kinds of content. This certainly departs from accepted usage, which applies the word to heat, colour, certain organic feelings, *etc.* ; on the other hand it brings sensation into line with perception and conception, imagination, ideation, conation and volition, as mental *activities* which correspond to the contents percept, concept, image, idea and act.* There is, unfortunately, no term which corresponds in any similar manner with sensation itself, except sensum, the bearing of which has just been considered.

Finally, the words " know " and " perceive " call for increased definiteness. The American realists frequently employ them interchangeably ; " *a* is knowledge ", asserts Perry, " by virtue of its relation to the nervous system . . . *a* is also ' thing in itself ' by virtue of its intrinsic quality. Mars is knowledge (through) its relation to my perceiving activity . . . also thing in itself (through) volume and distance ".(8) This is undoubtedly confusing in so far as it ignores the vital distinction between perception, judgment, and knowledge.† Modes of consciousness are all correlative to their content ; and thus, while we perceive things or objects, we know principles, truths or facts. I shall therefore restrict the terms to this reference, although absolute precision is after all unattainable, since a fact or truth is also an object of knowledge ; still it is never an object of perception, nor is a perceived object, simply as such, an object of knowledge ; for in order to make it so we must advance beyond perception itself ; knowledge therefore, at the very least, is " reasoned perception " as Wallace has called it.‡

* Russell has adopted this course, but unfortunately without consistently adhering to it. " We give the name sensation to the experience " (*Problems of Philosophy*, p. 17). *Cf.* p. 37 below.

† At the same time perception is implicit judgment. For Alexander, however, " all experience is knowledge " (*Mind*, vol. xxxii. p. 2). *Cf.* below, p. 92.

‡ *Prolegomena to Hegel*, p. 186. *Cf.* Hegel's distinction between *Wissen* and *Erkennen* (*Philosophy of Religion*, vol. i. pp. 119, 120).

REFERENCES TO CHAPTER I

1. (P. 16). *Cf.* " an actual sense-perception (miscalled sensation) " (Bosanquet, *The Nature of Mind*, p. 54) ; Kemp Smith, *Prolegomena to Theory of Knowledge*, p. 69, on " ambiguity of the term sensation ".

2. (P. 16). *Cf.* Stout, *loc. cit. ante.* " ' Sensation ' almost inevitably suggests something distinctively mental. Sense-datum also is a question-begging word " ; and when we find Alexander asserting that " sensa are apparitions " (*Mind*, vol. xxxii. p. 2), the same difficulties attend that term also, even though " these apparitions are selections from real things ".

3. (P. 16). *Cf.* with reference to both terms : " For me experience is the same as reality. . . . You cannot find fact unless in unity with sentience " (*Appearance and Reality*, pp. 145, 146). *Cf.* p. 40 and Chapter XVI below ; also *The New Realism*, p. 258, on the ambiguity of " experience ".

4. (P. 17). *Present Philosophical Tendencies*, pp. 285, 308. *Cf.* also Reyburn, *Ethical Theory of Hegel*, p. 80 : " we must insist that *qua* mental contents (mountains and past ages) do move in our mental processes. . . . Hegel insists on the continuity and identity of natural things and the moving mental content of mind ". *Cf.* further below p. 198 on " Conscious Content " in Baillie's *Idealistic Construction of Experience*.

5. (P. 17). *Mind*, vol. xxxi. pp. 313, 317. In another connection Mr. Randle also adopts " sensible appearances " (*ibid.*, p. 284). *Cf. Critical Realism*, p. 240 : " the physical thing and the psychic state . . . are unquestionably two, and mutually independent ".

6. (P. 18). " The furious contests which the difference of a single diphthong excited between the Homoousians and the Homoiousians " (*Decline and Fall* (Bury's edition), vol. ii. p. 352).

7. (P. 18). *Cf.* Alexander, *Space, Time and Deity*, vol. i, p. 23. " The *-ing* and the *-ed* are distinguishable and the *-ed* is non-mental, and in some cases patently physical. " *Cf.* further, p. 49 below ; also *The New Realism*, p. 260, on " Experiencing " and " Experienced ".

8. (P. 19). *Op. cit. ante*, p. 312. *Cf.* also, " it would be more proper to regard sensing as a case of knowing ". *New Realism*, p. 150 ; and further below, p. 126. Similarly " I know an object " (*Critical Realism*, p. 205 and elsewhere).

CHAPTER II

THE IDENTITY BETWEEN SENSED CONTENT AND PHYSICAL EXISTENCE

1. In resuming the consideration of Professor Stout's position it must first be noted that he restricts his analysis to one aspect only of the whole situation. To overlook this would be to commit realism to an unwarranted presupposition—a procedure altogether unphilosophical. For Philosophy " cannot rest the existence of its objects on the natural admissions of consciousness " ; * and although the " objects " in this passage are Truth and Nature and Mind, still the principle has a universal application. Stout, however—but quite legitimately for his special purpose—takes " the existence of the physical world for granted. We are concerned only with the question how we know it in sense-perception " ; know physical entities, that is, as existing " independently of the conditions which make them perceptible ". † To take this existence for granted is, of course, to presuppose the entire realistic position—to transform philosophical into naïve realism. But it is impossible thus to divorce " the existence of the physical world " from the " question how we know it " ; for it is precisely the manner in which we know it that reveals its independent existence ; to " know it in sense-perception " ‡ is, for realism, to know it as existing, in certain of its perceived forms or modes, independently of its being actually perceived.

As has been seen already, this independent existence is common ground ; § and the problem concerns the part

* Hegel, *Logic*, sect. 1 (Wallace). † *Mind*, vol. xxxi. p. 385.
‡ The distinction made between knowing and perceiving (p. 19 *ante*) seems applicable here. *Cf. The New Realism*, p. 260.
§ P. 15 *ante*.

played, in the development of our knowledge, by sensa. Stout's contention is that sensa are not " identical with perceived features of physical existence " ; and I shall endeavour to show that, if this is true, then it is impossible for any knowledge whatever of physical existence to be acquired ; for we become eternally " confined *ex hypothesi* to the characters of our private mentality . . . hemmed in by an impervious circle of purely subjective conceptions. . . . We have a subject without windows or doors opening on nothing beyond itself ".* It must be noticed, however, that Stout maintains at the same time that sensa " are not themselves subjective. . . . They fall on the side of matter and not of mind " ; but to this point I shall return later on.

His first argument rests on the intimate connection between the changes in sensed content and those in the sense organs and nervous system. These changes occur correlatively ; and hence he concludes that " sensa have no existence apart from the percipient's organism ", and cannot be " identical with all or any of the external factors ". But this conclusion obviously commits us to noumenalism, meaning by this term that the character and existence of the real physical world are essentially different from and independent of the existence and attributes of sensed content, which thus becomes nothing more than " the representative in consciousness of the noumenal realm " † itself belonging to a distinct ontological sphere of its own. If, as against this, it is still insisted that sensa " fall on the side of matter ", then we have a phenomenalism akin to that of Kant in his later stage, though with the fundamental difference that Kant regarded " sense-contents " as " subjective states ". None the less were these states, in this late Kantian stage, also objective—" objects for consciousness . . . themselves part of the natural order which consciousness reveals. They compose the empirical self which is an objective existence, integrally connected with

* Bosanquet, *Implication and Linear Inference*, p. 157. Hegel, *Logic*, p. 241 ; *Life of Edward Caird*, p. 307.

† Kemp Smith, *Commentary to Kant's Critique*, p. 374.

the material environment. . . . The subjective is not opposite in nature to the objective, but a sub-species within it ".* So that just as for Stout sensa " fall on the side of matter ", for Kant sense-contents fall on the side of the natural order ; and when viewed from this angle, the two positions tend to approximate.

Philosophic realism, on the other hand, must maintain the existential identity between sensed contents and physical entities.(1) But in two vitally important respects, which will be found to dominate our whole inquiry, the nature of this identity must be carefully and definitely expressed. Its character may appear at first to be paradoxical or self-contradictory ; for while physical existents and sensed contents are thus existentially identical, they are at the same time distinct. Their relations are extremely complex. There is in the first place the distinction which consists in physical existence forming a *more comprehensive totality* than sensed content even while they are identical ; secondly there is the further distinction between sensed content which is *completely* identical and absolutely coincident with physical existents, and that which is only *partially* coincident or identical. For it is impossible, in the first place, to hold that the sensed content always and unvaryingly coincides with the physical entity ; the very conditions of consciousness themselves forbid this. Nevertheless it is essential for realism to maintain that the content and the entity are existentially one—are literally consubstantial—in spite of all their patent contrasts and disparities ; their identity is an identity in difference. So far as it ceases, or is in any way misapprehended, just so far there arises hallucination, illusion or error. But in no instance where physical reality is actually perceived—in no case, *i.e.* of veridical perception—is there any absolute variance or contradiction between the characters of the sensed content and those of the physical entity itself. Their discrepancy, or even conflict, is never more than a matter of fullness, of relative completeness, of the measure of agreement ;

* Kemp Smith, *ibid.*, p. xlvi. *Cf.* further below (Chapter VIII) on Stout's theory.

and however meagre this may be, it is always consistent with an underlying existential unity and consubstantiality.

The second point is of equal importance. In certain critical instances this unity and consubstantiality must become absolute, in the sense that the identity between the sensed content and the attributes of the physical entity must be final and complete. If this were not the case no direct perception of physical reality would be possible, and philosophical realism would never have arisen. We should possess no concept of reality as physical, and have no standard whereby to determine the various degrees of identity. The realistic interpretation of experience thus demands that while *e.g.* a physical mile can never be sensed, though it can be perceived, a physical inch may, and on certain critical occasions must, be at once perceived and sensed; just as, in the other direction, the mile may be both perceived and conceived, while 1,000,000 miles can be conceived only.* In general therefore the possibility of sensing, perceiving and conceiving depends on the nature and the range of consciousness relatively to any selected content; but in none of these activities are we ever faced with reality as noumenal, though it may often be imaginary. Similarly may—and occasionally must—the whiteness of snow, the yellow of the sodium line, the scent of a rose, the circularity or sphericity of a small object, the weight of an ounce, all be both sensed and perceived.(2)

It is possible, indeed, to establish a distinction in this respect between primary and secondary qualities—or any higher orders—somewhat akin to Locke's, while totally abolishing his duality between idea and substance, or between sensed content and physical entity. Primary qualities would then be those, such as size, shape, and weight, in which the complete permanent identity between these two categories is most readily discovered and maintained. Other qualities would be secondary or tertiary to the degree that this identity is obscure and inconstant; but always it would remain a matter of degree and never of absolute separation.

* *Cf. Space, Time and Deity*, vol. i. p. 41; and below, p. 85.

2. These principles must now be considered in their relation to the problem of the incessantly changing sensed contents and the conditions of consciousness. Is it possible to satisfy the just formulated demands of realism? or is philosophy driven, as is the case with Stout and the critical realists,* to some type of noumenalism or phenomenalism?

As I have already indicated, when we undertake the analysis of that unreflective experience from which all theories alike originate I believe these realistic principles can be firmly established.† In this analysis the first important step is the explicit recognition of sensed content purely *as such*—its strictly *theoretical* demarcation from the real physical existents of naïve epistemology; and I have already observed that when we discard all initial presuppositions we are left with the bare fact that this content is sensed.‡ For realism, as for all its rival "isms", this forms the starting-point; otherwise we should presuppose that direct perception of reality as physical which it is the aim of realism to establish. But one general feature of the whole situation still remains unaltered—that is the purely *presentational* character of this experienced content as distinct from its *ontological* nature and from allied questions of epistemology. Time, space, motion and innumerable other qualities are presented in this directly sensed content precisely as they were before its theoretic demarcation; their actual *appearance* is unaffected by all our theories equally, for while these may explain its conditions they cannot alter its inherent character.(3) This is true not only of the distinguishable elements of this content but also of their interrelations; we still remain aware therefore of the variations in sensed contents in their relations to the body of the percipient. These actually apparent factors form the bedrock of all theories alike; they are the same for realists, subjectivists or panpsychists;

* "We have no power of penetrating to the object itself and intuiting it immediately" (Strong in *Essays in Critical Realism*, p. 225). *Cf.* also *Mind*, vol. xxxi. p. 316.

† *Cf. ante*, Preface.

‡ P. 18, *ante*. It is never, of course, the sole factor, but occurs along with ideational elements almost from the outset of experience.

presumably, indeed, they must form the staple of animal experience also.

It may be objected here that any definite consciousness of this kind, especially so far as it involves relations, demands a developed knowledge of the properties of time and space, if not indeed of matter, force, energy and other natural agencies of a similar character. The suggested difficulty arises, however, simply from projecting our later-formed conceptual ideas backwards into the earliest phases of all experience; but this raises a further point of considerable importance. For the foregoing treatment of sensed content implies that it includes, as an essential part of its totality, both time and space together with many other basal physical entities; all these factors have a sufficiently definite character of their own, which is best described, perhaps, as that present to the experience of the higher animals, which in capturing their prey, let us say, are guided mainly, if not entirely, by changes in sensed content as related to their own bodies. It is from this early consciousness, obviously, that our later knowledge has been developed both individually and generically; and if this is not true—if there are no such primitive yet definite *sensed* elements of space, time, force, *etc.* *—then these can only be regarded as Kantian "pure" forms imposed by the mind upon the sensed manifold. It may be worth remarking therefore, particularly in view of the confusion which has attended the scientific theory of relativity, that this primary sensed character of space and time has been fully recognized by some idealists. "The spatial order of things which we see is *qua* order of things, the content of a perceptive judgment, in which universal ideas are presented through *sensuous symbols*." "Mathematics is concerned with the abstractions of time and space. But these are still the *object of sense*, although the sensible is abstract and idealized. . . . Geometry works with the *sensuous* but abstract perception of space. . . . At first the determinateness of spirit . . . gets the entirely objective character of

* For these terms there may be substituted extension, duration, resistance, *etc.*, so long as it is admitted that the sensed content denoted is the same.

externality in space and time ".(4) Provided that this original *sensed* definiteness of space-time is adequately recognized, the equally valid contentions of philosophical rationalism may be fully accepted; " space, time, and motion . . . appearing in their true nature as orders of relation which can be adequately apprehended only in conceptual terms ", to quote Professor Kemp Smith's summary of Leibnitz's standpoint; though it must be noted that for him these entities " lose all sensuous character . . . as sensible existences they are reduced to the level of mere appearance ".*

3. It must next be observed that this large and complex volume of sensed content which forms " the staple of animal experience " also constitutes the perennial objective of scientific investigation. This particular feature of the problem of knowledge is too often forgotten. Modern science is so widely conceptual in its methods and results that the part played by direct observation and experiment tends to be ignored or at least undervalued. But it is with *sensed* content—with its constants, changes and relations—that all science is concerned in the first instance; they form its world of " phenomena "; † in fact there is a crude yet real " science " even in animal experience as there certainly is in the case of savages.‡ The wiles of the hunter and the wariness of the hunted express a primitive " science " insofar as pure instinct is modified by imitation and learning; just as, in the same sense, we speak of a " science " of boxing or golfing. In all these cases alike there develops a system of generalizations which are hardly conceptual at all, and which bear directly and with high efficiency upon sensed content both subjective and objective. But, still further, this content continues to form one of the most important and valuable tests for all scientific inquiry, no matter how abstract this may become. The astronomer, the cytologist, the spectroscopist, even the modern psychologist with his galvanometer, controls his

* *Commentary to Kant*, p. 605.

† On this point *cf.* further below, pp. 65, 76.

‡ *Cf.* instances cited by Stout, *Manual of Psychology*, p. 374; " what is required is primary retentiveness, not explicit ideas " (p. 375).

methods and checks his hypotheses by means of difficult and delicate observations of sensed content which can be properly made only by trained experts; and the crucial importance of this work has recently been strikingly shown in connection with the experimental tests of the theory of relativity. "The concept" of simultaneity, asserts Einstein, "does not exist for the physicist until he can decide by experiment" . . . "coincidence is the only exact mode of observation and lies at the bottom of all physical measurements." *

Thus when we disregard all ontological presuppositions, we find that sensed content "lies at the bottom" of almost the whole of science. Now it is quite easily conceivable that there might exist an exact science of this sensed content purely in itself; a large body of generalizations, that is to say, referring to this alone, and including the percipient's organism as one supremely important factor.† Such knowledge would be in the true sense of the word scientific, only it would be free from all reference to anything whatever except sensed content. It could hardly deal even with "sensible" content, much less with matter or energy or force, as something not actually sensed. Nonetheless would its results be exact, constant, regulated by laws and exhibiting relevance and uniformity.(5)

I have dealt at such length with these features of sensed content because, obvious though they are, they have received insufficient recognition by epistemologists. The prevailing impression is that sensed phenomena, as such, are more or less chaotic, fortuitous, or contingent—characterized throughout, in short, by Bradleyan "contradictions". Stout, *e.g.* holds that "sensa, considered merely as they occur within individual experience, have no systematic order according to general rules, such as makes possible our daily lives".‡ But this overlooks the "systematic" connection between the changes in sensa and the observer's

* *The Theory of Relativity*, p. 22. Brose, *Theory of Relativity*, p. 14.

† Many of the primary principles of experimental psychology actually have this character.

‡ P. 390. "Our own bodies", it must be noted, are "a certain complex of sensa" (p. 395). *Cf.* further p. 44 below.

bodily conditions, whose " general rules " must be known by everyone if life is to go on successfully. Similarly Mr. Bertrand Russell begins by observing that " any statement as to what it is that our immediate experiences make us know is *very likely* to be wrong . . . confidence in our senses deserts us . . . the senses seem not to give the truth about the table, but *only* about the appearance. . . . The *one* thing we know about it is that it is not what it seems ". * And *therefore*, it is concluded, " sensa have no existence apart from the percipient's organism. . . . This is the natural view suggested *primâ facie* by the facts ".(6) In striking contrast to science, which so confidently relies upon certain characteristics of sensed content, many current epistemological theories carry us back to the days of Hume. " The imperfection and fallaciousness of our organs on numberless occasions " are still considered sufficient grounds for advocating " a new system with regard to the evidence of our senses ".†

My starting-point then is the patent fact that certain contents within the whole of our experience are sensed; further, these contents possess definite characteristics and interrelations of a complex order which are—despite their complexity—also originally sensed. But so far as the problems of Realism are concerned, these facts in themselves are neutral; their implications therefore must now become the object of my further analysis, in order to establish the " existential identity between sensed contents and physical entities " referred to on p. 23.

REFERENCES TO CHAPTER II

1. (P. 23). *Cf.* Alexander, p. 15 *ante*. " Sensa are identical with perceived features of physical existence." Russell regards sensations as being at once physical and psychical in their nature. I consider his position in Chapter X below, and the somewhat similar view of Holt in Chapter XII.

2. (P. 24). Stout categorically denies this. " We cannot identify

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* *Problems of Philosophy*, chap. i. I have italicized the words which seem to me to over-emphasize the meagreness of our knowledge of sensed content.

† *Inquiry*, xii. 1.

(the extent of the thing seen) with *any one* of the variable extents of the sense-presentations", p. 395. Italics mine. *Cf.* further below, p. 61. As Broad has pointed out, "science holds that in the case of two-dimensional (objects) there are positions from which the true shape can be seen" (*Perception, Physics and Reality*, p. 234; also pp. 238, 239). *Cf.* further p. 175 below.

3. (P. 25). A fact expressed by Locke in his well-known account of mind as "wholly passive in respect of all its simple ideas". *Cf.* Stout, *loc. cit.*, p. 385. "There is in all sense-perception a factor . . . a modification of the content of sense-experience which occurs independently of any reinstatement . . . present alike in normal perception, hallucinations and illusions."

4. (P. 27). Bosanquet, *Logic*, vol. i. p. 73. Hegel, *Logic* (Wallace), sect. 19, p. 231. *Philosophy of Religion*, vol. i. p. 138. My italics. *Cf.* also, "as *a priori*, space and time are universal and necessary . . . but it does not follow that they must be previously present as conceptions. They are fundamental, but they are an external universal" (*History of Philosophy*, vol. iii. p. 434). *Cf.* further below, p. 158.

5. (P. 28). This appears to be what Broad has defined as Phenomenalism. "The laws of science are mere transcriptions of laws connecting the perceptions that people actually have, and these perceptions and their laws are the objects of science" (*Perception, Physics, and Reality*, p. 164; abridged). *Cf.* "The vast mass of knowledge which science and everyday life give us about matter holds true of various sensations which occur to various men, and of the laws according to which these sensations are connected" (McTaggart, *Some Dogmas of Religion*, p. 95).

6. (P. 29). Stout, p. 387. Although he refers here to "corresponding variations" and "relevant bodily conditions", still this "correspondence" and "relevance" hardly receive their due significance in my opinion.

CHAPTER III

THE TRUE CHARACTER OF NAÏVE REALISM

1. I HAVE already remarked that my theory of Direct Realism is based on the analysis and formulation of the logical grounds which form the actual but unsuspected foundation of the standpoint of ordinary experience.* It is necessary therefore in the first place to express this standpoint as accurately and definitely as possible; and this is the reason why, in the succeeding pages, so much prominence is given to the attitude of the ordinary man. For it is obvious in the first place that the existential and consubstantial unity between sensed content and physical entities, which has been advanced as the basal principle of realism,† is a critical development of the naïve realism of unreflective experience, which regards the character of being sensed or sensible as only one among all the attributes of material things. It is a character which is sometimes—in the "appeal to the senses"—accepted as a decisive criterion of reality, while at other times it is heavily discounted as deceptive; and in both cases pragmatically.‡ The latter feature of this primary attitude is of greater philosophic interest than is generally recognized; for it plainly shows that even here criticism has already begun its work; naïve realism, in other words, is not quite so naïve as it is frequently supposed to be. It is, on the contrary, in spirit and in its own way truly critical, although of course never sufficiently so.§ Usually, however, it is regarded as somehow "instinctive"—as a tissue which springs from the absolutely unreflective activities of the

* Preface, p. 8. *Cf.* further p. 40 below.
† *Ante*, p. 23. ‡ *Cf.* below, pp. 33, 34, 75, 84.
§ On this point *cf.* further below, pp. 50, 52.

mind in the same way as a spider's web results from its organic structure.

"It seems evident" says Hume in the passage already cited, "that men are carried, by a natural instinct or prepossession, to repose faith in their senses, and that, without any reasoning, or even almost before the use of reason, we always suppose an external universe which depends not on our perception . . . men follow this blind and powerful instinct of nature . . . we are necessitated by reasoning to contradict the primary instincts of nature." It is important to notice that Hume's account of the situation is much truer to the actual facts than are those of many later writers. He says that "men repose faith in their *senses*"—not in their sensations; and thus he fully recognizes a vital point that is too often entirely overlooked, with the result that the whole problem becomes distorted from the very outset. For this statement, taken as it stands, means that the ordinary man identifies, to some degree, sensed content with the "external universe". He knows nothing, that is to say, of "sensations" in any strictly psychological or epistemological reference, except insofar as his natural outlook is modified by subsequent reflection; and this is undoubtedly true, though it is generally altogether lost sight of. Hume himself, of course, bases his own philosophy on "impressions" and "ideas"; but in so doing he fully recognizes that he is departing from the universal primitive standpoint. He says so explicitly —"we are necessitated by reasoning . . . this primary opinion of all men is destroyed by philosophy".

The starting-point of many of Hume's successors, however, is totally different from his own, and is therefore wholly untrue to the actual facts of the situation; and this is the more curious and significant in that some of them were realists. They began by accepting the current psychology of knowledge characteristic of almost all writers from Descartes to Hume; but they made the radical error of reading this backwards into the pre-philosophical standpoint, and so misinterpreting the earliest processes of pre-critical thinking. Thus, instead of Hume's "faith in the

senses" (1) we find sensations, which are now presented as the actual elements from which ordinary knowledge always develops; a description, as I have just said, totally incorrect so far as the plain man (as distinct from the theorist) is concerned. "This is untrue", as Hamilton observed nearly a century ago. "We are conscious of no reference, of no representation".(2) Only recently has there occurred some reaction against this persistent distortion of the character of naïve experience, as expressed in the neutral presentational continuum of Dr. James Ward, and Stout's insistence that sensa "fall on the side of matter"; while the American critical realists find it necessary to supplement their distinction between "objects" and "essences" by the old device of a purely instinctive feeling or belief that the physical world exists.* The use of "instinctive" in any such finally explanatory sense as this creates difficulties equally serious with those it is posited to explain; but I shall return to this point when dealing specifically with Critical Realism as a theory of perception.†

2. In the first place then, it must again be emphasized that naïve realism is "critical" to a greater degree than is generally admitted; for it recognizes, instantaneously and automatically, the distinction between content as physically real and content as sensed—that is as directly apprehended by means of the sense-organs; ‡ but, despite this distinction, it—again automatically—identifies these contents. That this identification is pragmatic or practical, that its transcendence of the distinction in question is not explicitly reasoned, must be fully admitted; but this in no way affects the fact itself. The sportsman sighting his rifle—the footballer converting a try—the golfer driving—all unreflectively distinguish what they directly apprehend through vision alone from what they take to be physically real; but they also identify them.§ Stout fails to do full

* "We instinctively feel these appearances to be the characters of real objects. . . . We may consider our instinctive and actually unescapable belief justified" (*Essays in Critical Realism*, p. 6).

† *Cf.* Chapter XI.

‡ *Cf.* here p. 18 *ante*.

§ This is true also of direct scientific observations—*e.g.* microscopical and astronomical. But the scientific training, in itself "critical", usually destroys the original *naïveté*, and the majority of scientists, influenced by past philosophic tendencies, are phenomenalists.

justice to this ever-present distinction. "For each individual", he says, "the material world has two parts, though it is only in critical reflection that he comes explicitly to distinguish them . . . his own sensa and physical existence."* This, of course, is true; but it ignores the cognate *implicit* distinctions characteristic of all ordinary experience which make it partially, though never fully, critical.

Here it becomes fundamentally important to notice further that these distinctions are always correlated—and often most accurately correlated—with the spatial position and general conditions of the percipient's body; of this the instances just cited afford ample evidence; and I have already suggested that this systematic connection is ignored by Stout, as also by epistemologists in general, so that sensed contents are regarded as being, apart from careful psychological analysis, always apprehended as fortuitous; "sensa within individual experience have no systematic order according to general rules".† Actually, however, this psychological precision is largely anticipated in practical life. The ordinary observer may know nothing about the varying images on the retina, the vibrations of the inner ear, or the processes in end-organs and cerebrum; but he knows fairly exactly the difference made by moving one hundred and fifty yards nearer a golf green, and that exercise or a drug affects the delicacy of his sensory discrimination. This correlation between sensed contents and bodily conditions, that is, while never traced to its ultimate bases, is still clearly understood in principle and adhered to in practice. But again, as in the case of the distinction between sensed contents and physical existents, so their correlation to the organism does not preclude the identification of these two categories. These are the normal perplexities which face the ordinary individual; but he remains a realist, further, despite serious abnormal phenomena—hallucinations, illusions and errors, with which he is

* P. 394.

† *Cf. ante*, p. 29, n. 6. As against this, we find "in approaching or retiring . . . the sensum increases and diminishes in magnitude in a regular way" (p. 396). There is a slight contradiction here.

thoroughly familiar in practice, though he knows nothing of their theory. It is not surprising therefore that this attitude, so persistently maintained, should be regarded as instinctive, non-rational and alogical. It is worth considering, however, whether—though thus apparently innate—it rests on any ascertainable and specific grounds; and how far, when given theoretic formulation, these grounds can carry us. Quite obviously they must express features which are so much part and parcel of daily life that they are universally familiar, and cannot therefore but appear trivial. But this is unavoidable; for we are here simply giving formal expression to principles which are unquestioningly accepted in every phase of normal activity and appealed to when this becomes abnormal.

My own opinion has already been definitely expressed in the Preface—naïve realism can be so treated as to yield a firm basis for a philosophic Direct Realism; and the chapters immediately following will be devoted to the detailed elucidation of this position.

REFERENCES TO CHAPTER III

1. (P. 33). "This table, which we see white and feel hard, is believed to exist independent of our perception, and to be something external to our mind" (*Inquiry, loc. cit.*). Similarly Hamilton, *Lectures*, vol. i. p. 272. "Consciousness gives the mental subject as perceiving an external object, contradistinguished from it as perceived; all this we cannot deny." *Cf.* also p. 288. Hamilton of course, just as Hume did, went on to criticize these earliest deliverances of consciousness; the point here is that both thinkers agree in their account of the facts which they endeavour to explain. *Cf.* James. "The first things experienced by the child probably appear as simple *beings*, neither in nor out of thought. . . . The consciousness of objects must come first" (*Psychology*, vol. i. pp. 272, 273).

2. (P. 33). *Ibid.*, vol. ii. p. 106. But Brown, *e.g.* held "that we have, on the occasion of certain sensations, an instantaneous and irresistible conviction of an outward object" (Mill, *Examination of Hamilton*, p. 164). Similarly for Reid: "The notion of hardness is first got by means of that particular sensation which, as far back as we can remember, does invariably suggest it . . . sensation suggests the notion of present existence" (*Inquiry*, pp. 122, 111); and for James Mill: "To have a feeling is to be

conscious; to be conscious is to have a feeling" (*Analysis*, vol. i. p. 171, first edition); while his son describes—not explains—ordinary experience as follows: "I see a piece of white paper. I go into another room, and though I have ceased to see it, I am persuaded that the paper is still there. I no longer have the sensations which it gave me . . . my present sensations", it must further be noted, "are fugitive" (*Examination of Hamilton*, p. 192). Bain continues this tradition: "The feeling of colour by itself implies no knowledge of any outward object, as a cause or a thing wherein the colour inheres. It is simply a mental effect or influence, a feeling or conscious state" (*Senses and Intellect*, p. 370); and Sully holds that in perception the mind "supplements a sense-impression by revived sensations, the whole aggregate of actual and revived sensations being integrated into the form of a percept" (*Outlines of Psychology*, p. 153). This final quotation is instructive in showing the transition from the dubious term "sense-impression" to the definitely subjectivist "sensations".

CHAPTER IV

THE PRIMARY GROUNDS OF DIRECT REALISM

1. With this description of the general character of normal experience in our minds, I shall now begin my consideration of the conditions which control its early development; and in this connection the distinction between awareness, and the content upon which awareness is centred—between consciousness, as an activity or process, and the objects of consciousness—has already been referred to.(1) It has not, however, always been accorded its due importance. For Locke, as Professor Gibson has pointed out, "idea is at once the apprehension of a content and the content apprehended; both a psychical existent and a logical meaning"; similarly in the case of Hume, "red is spoken of as a sensation, viewed both as being a sense-content and also as the sensing or awareness of it".*

In considering the correlation between sensed content and sense-organs, therefore, we must rigorously guard against the assumption that the conditions determining consciousness or awareness also determine either the existence or the nature of the content that is apprehended. This, no doubt inadvertently, is pre-supposed by Russell in dealing with "The Nature of Matter".(2) The result is an obvious confusion between the sensing ("sensation") of colour, hardness and sound, and these sensed contents themselves; and the conditions which determine the cessation of sensing are then regarded as also determining the cessation of the existence of the contents.

But this is wholly illegitimate. The conditions governing

* *Locke's Theory of Knowledge*, p. 19. Kemp Smith, *Commentary to Kant*, p. xli.

awareness are purely negative conditions, in the sense that without them consciousness becomes impossible ; we cannot therefore straightway convert them into positive conditions which regulate the apprehended content ; whether they do so or not still remains an open question. They determine those relations of the sense-organs to the world which are essential to their normal functioning ; but they need no more necessarily determine the details or the nature of what is apprehended than the shape of a beaker influences the essential character of the chemical processes occurring within it, or the size of a chess-board affects the value of the moves. As Stout expresses this principle, such " variations in the content of sense-experience do not imply corresponding variations in external objects. These variations are irrelevant ".*

Thus these purely permissive conditions of the physiological activity of the sense-organs must be regarded as being in the same way permissive conditions of awareness ; and this leads to a further principle of equal importance—a principle which is receiving increased recognition, but which is still too often ignored—that sense-awareness is originally always directed upon content which is existent.† It is necessary to grasp the exact significance of this position at this initial stage of my argument. In the first place, it includes that distinction between awareness and content which has just been referred to.‡ As yet, however, I have arrived neither at " knowledge " nor " object ", as such ; nor even at Alexander's simpler position, as already affirmed at the outset—" something which exists independently of being known ". All we have thus far is sense-awareness as inherently related to content—content which, further, is existent.(3) But not, as yet, *independently* existent ; for that is a higher level whose attainment obviously constitutes one of the problems to be dealt with.

" Existence ", again, is undoubtedly in its full significance a concept of late development and a correspondingly high

* Pp. 394, 395.
† *Cf.* James, *Principles of Psychology*, vol. ii. p. 287.
‡ *Cf.* pp. 19, 37, *ante*.

order of complexity. Nevertheless, it always remains the idea of an attribute which is (primarily) inherent in the *totality* of sensed content, and (secondarily) in the *elements* of that totality as these become gradually differentiated.(4) As I have already argued with reference to space and time,* so existence is at first wholly identical with *sensed contents*; for however much these contents differ from each other they all share existence in common. It is in that content that "existents"† first become revealed, and revealed with a character so vivid, intense and continuous, that they at once become unreflectively accepted as the criterion of all existents; so much so that this naïve standpoint has been incorporated in the philosophy of materialism and epiphenomenalism. If the conditions of primitive experience had been altogether different—if consciousness, *per impossibile*, began with faint images instead of "lively sensations"—then our later ideas of real existence might have been wholly different too. But as it is, the contrast between sensed contents and transient and faint images is so striking that "existents" at once become identified with the former only. For we are not concerned here with any distinctions between mere existents and determinate existents, nor with the *modus operandi* of sensing, but solely with the patent characteristics of sensed content within ordinary experience; it is this (to repeat) which is "existent".

It is true that it is *logically* possible to distinguish categories more abstract than "existent", as *e.g.* the "Being" and "Quality" of Hegel. I am concerned at present however not with logical possibilities, but with "ordinary experience"; and from this practical standpoint the "existent" is primarily sensed content, and *vice versâ*. It is significant, in this respect, that the "existent" is itself one of the earliest Hegelian categories, attained immediately after "Determinate Being";‡ and this

* *Cf.* p. 26, *ante*.

† I use this term to avoid confusion with "existence", which is an idea acquired at a later stage.

‡ *Logic*, sect. 90.

movement of elementary thought is paralleled by a psychological development such as is described by Ward in his analysis of "Perception and the Intuition of Things"; * while for both the logician and the psychologist the existents first experienced are "sensible", or "primary sense-presentations"; so that in the "immediate judgment the subject is invested with a universality which is an immediate and therefore a *sensible* quality". † "Existence" (once more) is a much more advanced category expressly distinguished from "existents" themselves; for "Existence is the indefinite multitude of existents as reflected-into-themselves", ‡ while from the very beginning of all experience this "multitude of existents" is the object of sense-consciousness.(5) But though all this is admitted, its ultimate implications as constituting a sound logical basis first for naïve, and then for philosophic, realism, have been completely overlooked by all the writers I have just referred to. Returning to Hegel, *e.g.* we find that the "point of departure (of philosophy) is Experience; including both our immediate consciousness and the inductions from it. Awakened by this stimulus, thought is characterized by raising itself above the senses and inferences from the senses", so that there results a "state of antagonism to the phenomena of sense" §—an antagonism that can be finally overcome only by a still profounder thought. As Bosanquet has expressed this, for "sense Reality appears in a quasi-satisfactory form . . . it breaks down, and demands the effort to complete it by way of thought". ‖ This is plainly true; but my entire argument is that the "way of thought" itself discerns an implicit logic in the immediacy of ordinary experience which constitutes a firm basis for a philosophic Direct Realism.¶

2. As yet, however, I have attained neither to "fact" nor "reality"; we have nothing more than sensed content as existent, or existents as sensed; and thus the problem

* *Encyclopædia Britannica* Article, sectt. 17, 20.
† *Logic*, sect. 172; my italics.
‡ *Ibid.*, sect. 123. *Cf.* further on the existent as sensible below, p. 304.
§ *Ibid.*, sect. 12. ‖ *Logic*, vol. i. p. 72, n. *a*. ¶ *Cf.* p. 31, *ante*.

becomes that of the way in which " existence " expands this primary inherent reference, and so acquires that much wider meaning which the unreflective observer ascribes to it ; or in other words the way in which existence and sensed content become distinguished from, yet also remain continuous with, one another,* so that " to be sensed " is finally regarded as a category included within " to exist ".

The entire evolution will be found to exhibit several distinct phases. We must begin with the fact that the specific contents of the special senses quickly come to form those complex definite groups the elements of which are all repeatedly sensed simultaneously ; these groups are the nuclei, or germs as it were, of all later perceived objects.(6) It must further be observed that in this fundamentally important primary process of development the contents of vision play a part of the most extensive and permanent influence. For psychologically, as compared with the contents of the other special senses, the visible elements are marked by a high degree of diversity, clearness, definiteness, and continuity or uninterruptedness ; and the inevitable result is that the seen factors rapidly become dominant within each complex group (or later " object ").(7) As experience becomes still more advanced, and as innumerable associative bonds are created, an equally important result occurs. The visible elements, whenever they are sensed alone, finally invariably arouse and sustain our consciousness of their previously associated factors *as existent*, even while these latter are *not* themselves actually sensed ; and thus there steadily develops our consciousness of existence which is independent of being sensed—an advance, plainly, of absolutely vital importance.

For it must be remembered that all sensed content is at first *inherently* existent ; existence is its universal attribute. It must inevitably follow therefore that whenever the seen elements of any group thus arouse the imaginal consciousness of their unsensed associated elements, this consciousness must be of these elements *as existent*, despite their not being actually sensed ; and in this way

* On this apparent paradox *cf.* pp. 33, 34, *ante.*

there arises the primitive distinction between existence and being sensed. Within the totality of sensed content, further, existence is found to begin and to cease almost in complete independence of the observer's control. He must adapt his own existence and activities to those of the sensed world, almost as an animal does; while his ignorance of the nervous concomitants of experience is often absolute. Thus the concept of existence—the "noetic synthesis" of reality—as both one with and yet distinct from sensed content, and, still further, as independent of sensing, unconsciously develops and dominates the mind, somewhat as the general knowledge of a foreign language hovers in the background while we translate it. It is true that the representative image element is of a totally different character from all sensed contents—it has the attributes of the Humean "idea" as compared with the "impression"; it is in short mental or psychical; but it is nevertheless always inseparably associated with existence as sensed.

This feature of the entire perceptual situation implies further that the direct consciousness of existents precedes the consciousness of images *as* images. Here most especially we must guard against the fallacy of interpreting naïve experience from the psychological standpoint instead of from the purely naïve standpoint. "The duty of the philosopher" says Alexander, "is to put himself into the skin of the innocent original, and this is part of what I mean by strenuous *naïveté*;" * and when the "innocent original" becomes aware of attributes as existent even though not actually sensed, his consciousness is of those existent attributes themselves and not in any degree of the images and ideas which establish and sustain that consciousness. Of this ideal content, as such, he becomes conscious—if he ever does so—only at a much later stage; and the result is that its own psychical nature at once becomes regarded as "unreal", simply because by that time "existence" has acquired those indelible characteristics revealed in sense-awareness. In other words, the imaginal and ideal elements, although of course they are

* *Mind*, vol. xxxii. p. 4.

undoubtedly present in the percipient's mind, never reveal themselves to him in their proper nature; they constitute a hidden "power behind the throne" as it were, which performs an indispensable function while itself remaining wholly undiscerned; this function being that of the logical significance of environing existence—a significance which thus becomes inherent in image-content owing to the very conditions of its development, in exactly the same way that existence itself is inherent in sensed content.(8)

This logical significance of the image speedily comes almost completely to overshadow its psychical nature; for it is constantly confirmed by repeated sensing, while its own psychic character can be detected only through careful introspection. Conversely, again, as experience further proceeds, whenever the dominant visible factors of any group are not themselves actually seen, the sensing of some associated elements inevitably arouses in its turn the consciousness of the visible factors as existing; so that by a process which is at first disconnected and fragmentary, but which rapidly becomes general and systematic, there arises that (developed though subconscious) distinction between the limited sphere of actually sensed content and the wider universe of real existence, which is so fundamental a feature of naïve realism. It is superfluous, I think, to ascribe much importance here to social intercourse. This can only confirm the experient's own conclusions, and has therefore little, if any, native force of its own. The still further stages, which enable even that minimum of sensed content which is always present in experience to maintain the concept of the existent world, are similar in principle and therefore easily traced; until this concept ultimately expands into that of the world which persists or endures independently of *all* sense-awareness, and then becomes still further elaborated by the parallel distinctions between objective and subjective, physical and psychical, based as these are on the patent contrasts between the objects of "outer" and "inner sense".*

* This theory leaves the precise functions of association an open question, and implies a "noetic synthesis" such as underlies Stout's treatment of perception, as apart *i.e.* from the realistic problem in itself

3. This development of normal experience, regarded as a whole, is due to the influence of two coöperant factors. The first is that quality of " existence " which is *sui generis*, and from the very beginning inherent in all sensed content. Secondly there is the difference in vividness—in intensity—in " liveliness ", as Hume called it—between sensed content and mental or psychical states ; * a difference so impressive that it, in its turn, becomes inseparably associated with all " existence ", so that " to exist " is primarily to exist as sensible, and therefore as " physical ", in the original meaning of this term of " non-mental " or " extra-bodily " which lies at the root of the later distinction between self and not-self.

I have just said that social intercourse plays only a subordinate and corroborative part in this development. For this must of itself result in every individual regarding physical existence, in being independent of *all* sense-awareness, as " common " to all individuals. I leave the possibility of the direct knowledge of other minds, as minds, an open question ; my contention here is that every individual percipient's experience develops of itself into the awareness of a " common " world, though this is quite compatible with, and indeed necessitates, " private " perspectives ; and intersubjective communication undoubtedly facilitates the entire process and confirms its conclusions ; only it is not indispensable. The character of this common world is a problem still to be considered ; for hitherto I have dealt only with its distinction from sensed content as being a wider category—a more comprehensive totality.† But, while thus distinguished, there is also a continuity which is rooted in consubstantiality ; and the nature of this continuity still awaits analysis. Thus far, however, sensed existence has become cognized as physical—that is, non-mental—existence whenever the general permissive conditions of awareness operate ; whenever therefore I perceive a " body-complex " ‡ similar in its essential nature to my own, that complex is at once

* *Cf.* further Chapter XV on " The Nature of the Image ".
† *Cf.* p. 23, *ante*.
‡ *Cf.* p. 28, n. ‡, *ante*.

taken to condition awareness of physical existence precisely as it does in my own case. Thus sensed content, as being identical with physical existence, becomes one fundamental basis of subjective intercourse, instead of intercourse serving wholly or mainly to create the concept of the physical world. At the same time it is quite possible that mind knows mind directly; and intercourse, again, expands my own concept of the physical universe.

It is therefore impossible to regard naïve realism as "instinctive" in any literal sense of that term, as is done by the Scottish common-sense school in one way and by the modern critical realists in another. It certainly closely *resembles* instinctive action in its rapidity and unreflective mechanicality; but these characteristics are the results of a long practical process of trial and error, of inference which is never recognized as being inference, which occurred at a stage so early as to leave no traces in memory, being lost sight of in its practically valuable results.* Nonetheless this ingrained attitude continues to constitute our test for existential physical reality, as when sense-illusions are investigated or the familiar effects of colour contrast analysed.

It cannot here be objected that even the "practical process of trial and error" just alluded to itself *assumes* a realistic standpoint, except in the important sense that "sensed content is at first inherently existent; existence is its universal attribute". † But this cannot properly be called an "assumption"—not even an unconscious assumption. It is rather the initial and basal foundation of all experience—the foundation, therefore, of all our assumptions without exception. Trial and error thus merely render this foundation more definite and secure, without in any degree introducing it as a presupposition.

It is important to notice further that no causal principles have as yet been appealed to; for these are never involved in this connection until naïve realism becomes sophisticated

* On the other hand the realism of the newly-hatched chicken pecking at grain must be truly instinctive.

† *Ante*, p. 41.

by science or philosophy. The sensed content is not at first regarded as *caused* by unsensed existents ; * it simply becomes *distinguished* from physical existence, but only in the sense of forming a subdivision, more or less accidentally delimited, within such existence as a wider whole, with which however it still remains always continuous because consubstantial. That my theory necessitates no explicit recognition of causation here is a strong point in its favour. For it is plainly impossible to introduce so complex a concept into the earliest phases of life. No doubt its rudiments arise at a low level of experience ; but it is not, like existence, inherent in all sensed content from the very commencement.

I have now suggested a theoretic explanation of that unreflective process by which there arises the naïve realist's simultaneous (but apparently paradoxical) identification, and distinction, between sensed contents and physical existents, so that the latter form " a wider category—a more comprehensive totality " within which the former are contained.† There still remains, however, the allied problem of the further distinction, subsisting wholly *within* the sphere of actually sensed content itself, between those sensed elements which are *completely* identical with physical existents, and those which are only *partially* so identical—which lack, that is, some of the characteristics essential to physical existents as such. This distinction is obviously never absolute but always one of degree ; " it is impossible to hold that the sensed content unvaryingly coincides with the physical entity ; their identity is an identity in difference . . . a matter of relative completeness, of the measure of agreement " ; ‡ a subject which will receive fuller treatment in the succeeding chapter.

* Causation, *i.e.* becomes recognized as independent of whether content is actually sensed or not. *Cf.* Chapter XIII.

† *Cf.* pp. 23, 43, *ante*. " Physical " again means " non-mental " merely.

‡ *Cf. ante*, p. 23.

REFERENCES TO CHAPTER IV

1. (P. 37). *Ante*, p. 19. *Cf.* Perry, *Present Philosophical Tendencies*, p. 274: "Distinction between *action* and *content* of consciousness, sensing and sense-content, thinking and thought." Also Alexander, *Space, Time, and Deity*, p. 5: "Mind knows or experiences; external things are known or experienced."

2. (P. 37). "The colour ceases to exist if I shut my eyes, the sensation of hardness ceases to exist if I remove my arm, the sound ceases to exist if I cease to rap the table" (*Problems of Philosophy*, p. 42). Similarly in *Mind*, vol. xxxi. p. 481: "a perception consists of (*a*) a core of sensation; (*b*) images and beliefs called up by the sensation". Here "sensation" is on the same level as "images and beliefs" and is therefore content; but in *Problems*, p. 17, we find "we give the name sensation to the experience of being immediately aware"; here "sensation" is process or activity; while throughout *The Analysis of Mind* "sensations" are once again contents or objects—"sensations; what is heard or seen" (p. 25). *Cf.* a parallel case in Stout's article, p. 403: "identifying the sensation with what is seen".

3. (P. 38). *Cf. ante*, p. 15. "There is nothing epistemologically more unsound than (the) identification of the knower's knowledge or experience with the reality of the object he knows. Knowledge, experience, consciousness—all such terms—contain in their very essence a reference beyond the subjective process to a reality known or experienced in that process" (Pringle-Pattison, *Idea of God*, second edition, p. 422). *Cf.* further p. 423.

4. (P. 39). The psychological principles involved are, I think, best expressed in Ward's treatment of the presentation continuum in his *Encyclopædia Britannica* article.

5. (P. 40). *Cf.* "first consciousness in general, with an object set against it . . . sense-consciousness is aware of the object as an existent" (Hegel's *Philosophy of Mind*, pp. 176, 198). Similarly for Kant: "existence is the *absolute* positing of a thing . . . only that is absolutely posited, which is *given in experience* as actual, as matter of fact" (Ward, *A Study of Kant*, p. 15). "Sentient experience" again, as Bradley affirms, "is reality, and what is not this is not real . . . you cannot find fact, unless in unity with sentience" (*Appearance and Reality*, pp. 144, 146). "In empiricism", further, "lies the great principle that whatever is true must be in the actual world and present to sensation" (Hegel, *Logic*, sect. 38). *Cf.* also Kant's "Anticipations of Perception": "the Real, that which is an object of sensation"; also p. 16 *ante*.

6. (P. 41). Their definiteness however is not rigid, but soon becomes plastic; it permits of changes, but only so far as the changes prove to be themselves definitely conditioned. Ward maintains the "simultaneous projections into the same occupied

space of the several impressions" (*Encyclopædia Britannica*, sect. 20 (*c*)). I should question anything which may be called "projection", though there is of course a complex development of perception. All I require at this stage is simultaneity. My position here agrees with Alexander's, *Space, Time, and Deity*, vol. ii. p. 86: "I have seen and felt. . . ."

7. (P. 41). Even in the comparatively few exceptions this principle applies to some other sense, which plays the same part as vision does normally; *e.g.* touch or hearing in blind persons.

8. (P. 43). *Cf.* Bosanquet, *Logic*, vol. ii. chap. x. In its application to sensed content, his category of "mental states" seems to me to be too inclusive. *Cf.* p. 37 *ante* on the double character of Locke's "idea"; this, however, must never be interpreted in Locke's dualistic fashion.

CHAPTER V

THE FURTHER DEVELOPMENT OF EXPERIENCE AS THE BASIS OF DIRECT REALISM. REALITY AND APPEARANCE

1. In considering this further advance, it must be recalled that sensed content has been seen to carry with it the indelible stamp of existence * from the first moments at which awareness begins to acquire some degree of definiteness; and this impress is always retained unless its validity is explicitly disproved, either partially or completely. For even when it comes to be regarded, on any philosophical grounds, as *not* thus identical with real existence, it still remains *representative* of such existence and the sole ultimate means by which this may be apprehended. "The physical existence which is not immediately experienced (the individual) has immediate knowledge of, in knowing his own sense apparitions. In knowing distinctions and relations between his own sensa he knows corresponding distinctions and relations in the domain of physical existence." † The exact significance here of the term "corresponding" is very variable; it may imply either phenomenalism or noumenalism, or again realism in the sense in which I have myself employed the term hitherto; ‡ while Stout himself employs it to elucidate his own realistic system, for which, while sensa "fall on the side of matter", they are still never "identical with all or any of the external factors".§ But within our ordinary experience sensed content remains identical with physical existence until this identity is modified or destroyed by completer knowledge. "If the percipient does not

* But not independent physical existence, the consciousness of which has just been shown to be the result of a process.

† Stout, *loc. cit.*, p. 394. ‡ *Cf.* p. 33 *ante*. § *Loc. cit.*, pp. 386, 387.

otherwise know the contrary, he will believe that there is a man behind the mirror;" * while the uninstructed victim of sensory hallucination also identifies his sensed content with real existence.

Once more it becomes essential to accord a higher degree of importance to naïve realism than is usually recognized.† For although its working principles are merely implicit, they are none the less definite and in the main consistently adhered to. And since all philosophical systems—including every type of realism—begin with a criticism of naïve realism, it is extremely unfortunate that only the final results—the accepted conclusions—of our unreflective experience are thus critically modified or repudiated while little attention has hitherto been given to their underlying generative processes.‡ In this respect, however, naïve realism is like naïve ethics. In both cases alike the position, taken broadly, is unconsciously critical, though it is never critical enough; and in both cases the basal principles, governing as they obviously do with a large measure of success the general course of life, merit more attention than they usually receive from philosophical theory.

In pursuing our analysis a stage farther we shall appreciate the standpoint of everyday experience most accurately by noticing that while the principle that "awareness is always directed upon content which is existent" § certainly gives theoretical form to the essential character of that experience, still all the emphasis falls, originally, not on awareness but on existence. It is the sensed *content*, as inherently existent, and not the conscious process, that is always attended to; but attention is only one special form of awareness. The concept of existence, that is, is not the concept of some entirely distinct attribute, which is at some later stage added on to the primal content; existence is rather from the very first *implicit in* all that content, *inherently one* with it; and its later definiteness and diversity are merely the results of the gradual transformation of its original implicitness into full explicitness. For

* Stout, p. 408.
‡ *Cf. ante*, Preface.
† *Cf.* pp. 31, 33 *ante.*
§ *Cf.* p. 38 *ante.*

if this is not the case we are compelled to regard " existence " as originally derived—as such and in itself—from some source absolutely excluded from content which is sensed, and then connected with this content, at some stage or other, by a process which overcomes their original alienation ; but this, obviously, is to revive the classic opposition between " reason " and " sense ", between " innate ideas " and " sensation ", with its insuperable dualism of experience and reality.

It is extremely important to observe further that this inherence of existence within sensed content is not adopted here as a mere assumption from either the epistemological or the psychological standpoint.* It is offered as an accurate description of consciousness, confirmed both by psychological observation, intro- and extro-spective, and the logical exclusion of any alternative. This is equally true of the analysis of that further process whereby we advance from the consciousness of mere existence to that of independent existence and, later still, of independent physical existence. This process, while almost completely unreflective, is none the less truly critical—so far as it goes—and its results are sufficiently definite. But in the succeeding stage, which is the final stage attained by the unreflective individual, this criticality becomes still more manifest ; for it maintains the clear distinction between our perception of the complete, and the partial, nature of physical existents, or between " reality " and its " appearances ", as this is regarded in ordinary experience. In other words " appearance ", for the plain man, is always fragmentary or partial reality, although his standpoint here, as always, is taken up subconsciously ; and the partial appearances ultimately become for him representative of the full reality rather than explicit parts of this.† I believe further that appearance, philosophically, is always in principle partial reality ; a view explicitly expressed by both Bosanquet and Alexander.‡

* *Cf.* below, p. 56. † *Cf.* further pp. 55, 56 below.

‡ " Appearances or partial revelations to the mind " (*Space, Time, and Deity*, vol. ii. p. 184). " Reality is one, but its presentation varies " (*Logic*, vol. i. p. 77). *Cf.* further p. 81 below.

Here once more our terms must be carefully defined, since their meaning differs greatly according as they are employed in their naïve or their philosophic sense. For from the latter standpoint it may be held that we are never, under any circumstances, conscious of anything more than appearance—of incomplete or phenomenal aspects of the one Reality. But we must now consider only the position of the naïve realist. For him reality is that physical or material reality, of which he is conscious in sense-perception as the realm of nature and its artificial derivatives; and while he certainly distinguishes between the natural world and its subordinate parts, this world is viewed more as an aggregate than as the Whole or Unity which some philosophical systems take it to be. The naïve realist, in other words, is practically a pluralist. He perceives reals rather than reality; each object enjoys independent real being and is related externally to all others, instead of forming with them an internally related system—as it also does, of course, for reflective pluralism.* Appearances, therefore, must here be appearances as referred to, or compared with, these separate and distinct reals; and like these reals, appearances also are separate and independent; they are referred, not to one all-inclusive Whole, but to individual and self-complete objects. To adapt Stout's words to the situation, the sensed content (sensum) "is always identical with some feature of external existence. So far as appearances differ from what we take ourselves to perceive this is because in them what really exists in the external world is only partially revealed". This expresses the normal standpoint of naïve realism; and its difficulties only arise when "what really exists" is found to be "revealed in a distorted way".†

2. Thus far then the ordinary percipient remains practically unconscious that his experience is actually complex. Of awareness in general, and of perception and sensed content as such in particular, he knows hardly anything.

* As also for New Realism; this "tends to be metaphysically pluralistic rather than monistic" (*New Realism*, p. 33).

† *Loc. cit.*, p. 399, referring to Alexander.

His emphasis, as already remarked, falls on existents as independent of and diametrically different from his own being—as self-existent and as physical. As yet unconscious also of sense deceptions he " appeals to the senses " as his ultimate criterion of reality ; * and only a more prolonged experience can arouse any suspicion of their veracity.

As was the case, then, with our acceptance † of independent physical existence, so here in considering the later and more fully developed attitude, epistemology must begin by analysing the grounds on which this rests—by endeavouring to make explicit its implicit foundation.‡ This, no doubt, is a difficult task. For while we retain our philosophic innocence we lack the ability to describe our own outlook ; on the other hand the least knowledge of philosophy in itself implies that *naïveté* has been abandoned ; just as an animal cannot express itself, while by acquiring speech it would cease to be an animal. The investigation therefore must face the serious drawbacks of externality and retrospectiveness. But it is none the less altogether insufficient to describe naïve realism as " instinctive ", or to conclude that because it ignores difficulties which are patent to psychologists it must be wholly unfounded, and can only be transformed or repudiated. I shall therefore endeavour first to detail the general conditions of unreflective perception, and then inquire how far its results need be modified to accord with scientific truths and philosophic principles ; and as before, the facts themselves are trivial and familiar.§

In the first place then, those complex phases of experience which I have already described as from their very nature logically and inevitably leading to the consciousness of independent existence,‖ occur at so early a stage in life that the total content which is thus apprehended must necessarily be, in the main, relatively unchanging in its general characters. But this further necessitates that " appearances "—in the naïve sense just explained ¶—

* *Cf. ante*, p. 31.
† This appears to me as too unreflective to be called belief.
‡ *Cf. ante*, p. 50.
§ *Ante*, p. 35.
‖ *Ante*, pp. 43, 44.
¶ *Ante*, p. 52.

must at that period be the exception rather than the rule. The extent of the child's " world " is certainly very limited ; on the other hand, its characters are fairly constant and definite ; even when he moves about his attention is restricted to his own neighbourhood, so that all distant things and events fall within his faint and marginal consciousness. He lives in the " now " and the " here ", within which his playthings and other familiar objects retain, with comparatively little variation, *constant* shapes, sizes, weights, hardness and other qualities. There are throughout early childhood, therefore, only relatively slight changes in the main elements of sensed content (sensa) ; and even such unusual variations as do occur are, like all else at this stage, accepted at face value. It is difficult *e.g.* to get a child to see a church tower or any similarly prominent object in a distant landscape, simply because its sensed diminutiveness is, to him, its actual magnitude and therefore not detectable ; and the child frequently asks why distant objects *are*—not look—so small, and why they move—not *seem* to move—when he himself moves.* There is as yet, in short, no distinction whatever between " reality " and " appearance "—everything is real as it comes ; and his " world ", again, finds its unvarying centre in his own body.† To say therefore that his immediate surroundings remain on the whole invariant may appear an assertion too trivial because too familiar. Nevertheless it has very weighty consequences. For these familiar aspects—the " now " and the " here "—are just those which are later on universally regarded as " real " ; in other words, it is at this early stage, and because of its necessary ruling conditions, that our ordinary attitude to the material world unconsciously comes into existence and establishes itself once for all. For we have seen that the percipient has already and inevitably come to regard his sensed content

* A boy of three, seeing a herd of pigs running, was more interested in their reflection in a large pool, and on his return recounted having seen the animals " upside down " as the principal event he had witnessed ; their inversion was to him fully real.

† This is especially important as regards magnitude ; *cf.* the earliest standards, palm, handbreadth, and foot. On this point *cf. ante*, p. 38 n. †, and further p. 82 below.

as having independent existence; and this existence, as experience slowly expands, now becomes indelibly impressed with an almost invariant normal character.* This further step constitutes another vital advance. For, exactly as was the case with visible content in an earlier reference,† so this norm, once it has thus been established, remains ever afterwards dominant within the continuously expanding experience in two respects: (*a*) it constitutes that permanent general standard of "reality" by comparison with which every departure from it becomes an "appearance"; and (*b*) our consciousness of it, both in its detailed general character and also as this standard norm of reality, finally becomes universally and systematically revived by every sensed presentation of any "appearance". Every appearance—again in the naïve pragmatic sense of the term ‡—is, in other words, by the very conditions of its occurrence, at once inherently derivative from, subordinate to, and significant of, reality.§ Thus our unreflective discrimination of sensed content, as being independently existent, into "reality" and "appearance" now appears as the further necessary result of the conditions of experience itself. Neither existence nor independent existence, reality nor appearance, is in any literal sense an instinctive belief or deliverance of consciousness; all alike are the inevitable outcome of the inherent, though unreflective, logic of early experience; a logic which finds continual confirmation in the further fact that it is always "reality" which best lends itself to the percipient's own purposes and activities (and to himself he is, of course, essentially real) so that there is a constant confirmatory reaction between his internal reality and the external reality of the independent world; each, in short, maintains the other. Finally, as this independent existence becomes still further characterized as "physical",‖

* As before the process is essentially an individual one, though it receives confirmation from intercourse and instruction.

† *Ante*, p. 41.

‡ *Cf. ante*, p. 52; "pragmatic" as lacking any purely theoretic significance.

§ *Cf.* further p. 56 below.

‖ *Cf. ante*, p. 44, for the meaning of this term here.

so its real qualities become the qualities of "physical reality".

Here again it is essential to notice that no feature whatever of this long and unconscious process is here advanced by way of assumption.* Stout asserts that "Alexander cuts the knot by assuming that . . . the sensum is simply identical with some feature of the thing perceived. . . ".† So far as this is true it is obvious that the assumption begs the entire question in one of its most fundamental aspects. But no assumption whatever is required, so far at least as the practical standpoint of ordinary experience is concerned. For the identity in question—between sensed content (sensum) and independently existing objects as the things we perceive—is the inevitable outcome of the conditions and process of this experience itself; it is the implicit judgment which naturally develops as it enlarges, and so forms the foundation both of normal perceptual apprehension and of the higher cognitive levels of consciousness. Precisely the same is true of our original discrimination between reality and appearances. In adult life we undoubtedly proceed, by an unreflective inference, from appearances to reality, in the sense that very much of our sensed content is appearance which we interpret as reality. But originally—at the commencement of all experience—we advanced in the opposite direction, from reality to appearance; and this reality was necessarily constituted by the largely invariant existents of our earliest years. As compared with these originals, the later apprehended and much more various sensed contents inevitably come to be regarded as derivative appearances; further, the original existents having now attained dominance within experience owing to their priority, appearances rank as subordinate; while finally, since they invariably revive the consciousness of their predecessors as really existent, they become also significant of these ‡—become witnesses to their real existence, even when they are not actually apprehended, to such a degree that the actual character of the sign itself is lost sight of in that direct

* *Cf. ante*, p. 51. † *Mind, loc. cit.*, p. 399. ‡ *Cf.* p. 55 *ante.*

consciousness of the signified real which constitutes perception. It is wholly unnecessary, therefore, even were it logical, to *assume* that "the sensum (sensed content) is identical with some feature of the thing perceived".

But obviously, had the experiential conditions been otherwise, the result also must have been different. If man began his existence endowed with his fullest capacities of sense-observation—if he plunged straightway into the world instead of emerging slowly from the narrow confines of infancy and childhood—then his attitude to this world would necessarily have taken a completely different form. The face values of what are now appearances would in that case have been greater—the line of distinction between appearance and reality would have been drawn elsewhere. But to speculate on such abstract possibilities is useless; we must investigate experience as we find it; and then its actual course during its early stages inevitably generates our naïve apprehension of the nature of reality and provides it with a foundation which has a consistent, though implicit, logic of its own.

But this basis, further, is in the main strengthened by all later experience. For that aspect of any given object which finally determines itself as real is universally found to be related to the various appearances in a regular and systematic way. It ultimately constitutes their centre or focus, so that while they all represent it, it is only by straining ordinary language that it can be said to represent them.* It rather sums them up—synthesizes them—and relates them to one another in a unique way, to which no single appearance itself is adequate. It is the maximum, to which they are all approximations, either in size, weight, form or intensity. Although never unconditioned in the sense of being absolute, its conditions are nevertheless of a peculiar nature, inasmuch as they are interconnected with

* "Represent" here as in its political meaning; *e.g.* House of Representatives, or the representative status of a member of parliament; at the same time the idea of similarity is also involved, but only as the basis of the more essential significance. Apart from the metaphysics of Space-Time, this account agrees, I think, with Alexander's position. "As the whole within which the motions take place, (a thing) is the synthesis of them" (*Space, Time, and Deity*, vol. ii. p. 183).

all other similarly conditioned real things in a manner inapplicable to the conditions governing appearances. Thus the primary aggregate of separate reals * becomes further organized into a real " world ", whose laws and conditions may be represented by the appearances, but can never properly be fulfilled by them ; and whenever appearances exhibit mutual conflict or contradiction, this can be harmonized not by their being brought into direct relation, but only through their becoming indirectly related by means of the relevant real.†

Reality, in short, ever retains that inherent dominance which was the result of its originality and priority within experience. Specific instances are too many to detail ; but every instance of real and apparent shape, distance, weight, colour, intensity, motion, *etc.*, illustrates these general principles.

There are always of course exceptional and difficult cases, as in colour contrast, differences of illumination, or the shimmer of lustred and watered silks. But in all such cases the totality of the relevant conditions proves to be unusually complex ; while the phenomena are observed at that late stage at which the general contrast between appearances and reality has already been set up once for all ; we conclude quite logically therefore, not that there is here no reality at all, but simply that a certain number of varying aspects may all be adjudged equally real according to the particular point of view we decide to adopt.

Far too much importance, however, has been assigned to these exceptional instances in recent discussion. To a certain degree this is quite natural ; for the phenomena themselves are much more interesting than the content of ordinary experience. But it is illogical to base our philosophic conclusions mainly upon cases which after all form only a small minority of the whole, especially when, further,

* *Ante*, p. 52.

† After writing this I find that Mr. H. J. Paton suggests that appearances stand to the relevant reality in the same relation that any group of objects stands to the Platonic εἶδος ; the principle involved seems to be the same (*Proc. Arist. Soc.*, xxii. 85).

the practical distinction between appearance and reality, which has been analysed in the present chapter, proves adequate to so extensive a range of experience as it obviously does.

We must now consider how far all these implicitly logical foundations of realism can maintain themselves in the light of scientific fact and philosophic criticism.

CHAPTER VI

THE ORGANIC CONDITIONS AND CAUSAL ASPECTS OF PERCEPTION

1. It is obvious that in the foregoing analysis of perceptual experience it has proved necessary to consider very few real entities beyond those included within the totality of sensed content. This content must always be taken, of course, as an element or factor of perceived existence, wherein it includes both ordinary "appearance" and ordinary "reality". The physical entities with which science is concerned then come to be regarded as the imperceptible constituents of ordinary objects; but it is extremely instructive to notice, as one marked indication of the recent swing of the pendulum in this connection, that modern physicists are fully prepared to accept the naïvely realistic point of view without finding that it raises any insuperable difficulties in the treatment of their special problems.

This significant reversal of the typical phenomenalism of nineteenth-century science has found its most definite expression in Dr. A. N. Whitehead's recent *Concept of Nature*.* Similarly the investigators of radio-activity believe "in the reality of the existence of atoms and molecules, as much as that of chairs, tables, and lamp-posts. Vague ideas are being replaced more and more by exact quantitative knowledge which invites our literal acceptance. . . . The change of the single atom of matter is well within the range of direct perception by the senses. . . . Cleared of ambiguities, the conception of the individual molecule has become very real".(1)

* Pp. 16, 28, 29, 40.

Thus naïve realism is now finding a weighty endorsement in scientific realism ; and until quite recently the general basis of the philosophic objections to all such interpretations of reality might still be expressed in the words of Hume. " The crooked appearance of an oar in water ; the various aspects of objects according to their different distances ; the double images which arise from the pressing one eye ; with many other appearances of a like nature ",* have formed one basis alike of Kantian phenomenalism, subjective idealism and " pure experience " ; in other words, to return to Stout's presentation of the problem, the modern realist must " answer the question how, if the sensum is always identical with some feature of external existence, it is possible for the sensum to vary without corresponding variations in the external object which we perceive or take ourselves to perceive ".† Stout, however, carries the matter still further, and takes into account the correlation which undoubtedly always exists between the sensed content (sensum) and " variations in relevant bodily conditions " ; and basing his argument very largely upon these matters of fact he maintains " that sensa have no existence apart from the percipient's organism, and that what occurs outside the nervous system makes no difference to them, except insofar as it makes a difference to this. The sensum can no more be identical with *all or any* of the external factors concerned in the production of the physiological process than this process itself can be identical with its external conditions . . . neither the *real* nor the *apparent* shape of the external object is identical with the size or shape of the visual apparition immediately experienced . . . the sensum depends directly and ultimately *only* on the way in which the sense-organ is affected ".(2)

At first sight the differences thus asserted between sensed content and the " external object " or " external factors " seem to be as absolute as those between Locke's " ideas " and " substance ", or between Kant's " representations " and " transcendental objects ", or Lotze's purely intelligible " reals " and the perceived spatial world.(3)

* *Inquiry*, sect. xii. † *Mind, loc. cit.*, p. 399.

But Stout emphatically repudiates any such extreme duality. "These contents of immediate sense-experience fall on the side of matter and not of mind . . . if they were not material but mental we could not know anything about a material world. The sensum which we have on seeing (the moon) must be continuous in existence with it, and therefore fundamentally homogeneous with it in its general nature. The contents of sense-experience and physical facts must belong to the same order of being and be contained within the unity of the same continuous whole." *

Stout's position is thus far from being simple. It combines two apparently antithetical views of the relation between sensed contents and external objects. The former is not identical with "*all or any* of the external factors". *Neither* of the phases of the external quality is identical with the corresponding quality † of the content—neither the real shape nor the apparent shape; and yet, despite this extreme degree of severance, the related terms "belong to the same order of being . . . the same continuous whole"; so that we are faced with the difficulty which must arise when we exclude both Locke's duality of nature between "idea" and "primary quality" and their close resemblance.

But before undertaking any specific survey of these aspects of Stout's theory a preliminary point appears worth notice to make the issue clearer. Sensed content itself, then, can never be apprehended alone and in its purity; "the sensa may exist *per se*, but we cannot get them so", as Bosanquet has expressed this principle.‡ This is the result, further, of the very conditions of the situation; for here there arises once more that difficulty which necessarily attends the relation between the naïve realist and the epistemologist, or the animal and the human experient.§ For any experience which comprises sensed content alone || is obviously completely unreflective, and

* Pp. 386, 389.
† For "corresponding" *cf. ante*, p. 49.
‡ *Meeting of Extremes*, p. 13.
§ *Cf. ante*, p. 53.
|| Whether any actual case of this kind exists is doubtful; but the earliest modes of consciousness illustrate it.

can therefore never know itself to be such; while the simplest form of reflective experience in itself implies that sensed content has become merged in a wider whole which also includes pure psychical elements. Sensed content therefore is, in a way, an abstraction of epistemological theory—a limit to which we can approximate, but never actually attain. It is like the molecule or atom or electron of the physicist. "The sensa," continues Bosanquet, "are in every case abstractions out of the fuller wholes which we call minds." * But as against this conclusion, such content is never a *false* abstraction; it always denotes actual factors in an actual process, which are capable of being isolated by theoretical analysis in the same way as an electron—those factors, namely, of which we cease to be conscious immediately the sense-organs cease to function, and "which occur independently of any reinstatement from the past and are present alike in normal perception and in hallucinations and illusions" so far as these latter are sensory.† It is a quite legitimate suggestion, therefore, that a super-human observer might be reflectively conscious of our pure sensed content just as a physicist with a sufficiently powerful microscope might see a molecule.‡

2. Reverting now to Stout's general treatment of the entire problem, I shall consider the bearing of this unceasing correlation between sensed content and the "relevant bodily conditions" upon those basal principles of Direct Realism thus far elucidated. How far can our conclusions be reflectively adhered to when this intimate correlation is taken fully into account? I believe they are not merely unaffected, but are still more firmly established, by the facts in question.

Once again it is essential to begin from the standpoint of the naïve realist—as theory always has done in actuality; and then there arises the distinction between the "relevant

* *Cf.* Seth, *Hegelianism and Personality*, p. 79. "Green (shows) that the thinkers he criticizes have imported into sensation or feeling much more than they are willing to acknowledge."

† Stout, *Mind*, p. 385. I have omitted "dreams" here, because the activity of the sense-organs is usually suspended.

‡ *Cf.* Soddy, *ante*, p. 60, n. (1).

conditions" just referred to, and those more inclusive conditions of all sense-awareness in general which have already been dismissed as *not* relevant to the present problem.* Of the former group the percipient, purely as such, is completely, or almost completely, unconscious, while upon the latter he bases all his activities; and this provides the essential clue to their distinction. For the general permissive conditions are under his control, while the more delicate specific functioning of the sense-organs proper—of the retina and cochlea, of end-organs in general and their associated nervous structure—is beyond this control. But when he learns the nature of these functions he still remains a realist; and the next stage in our analysis of his standpoint (here resumed from the end of the previous chapter) must deal with his grounds for doing so—grounds which are, however, as in the case of all these earlier phases of cognitive development, implicit, subconscious, pragmatic —but not on that account "instinctive".(4)

The changes in sense-organs and nerves, then, ultimately become regarded as the effects of the action of the perceived objects—effects which vary in accord with the spatial and physical relations between those objects and organs in precisely the same way as all other effects that are produced by the interactions of objects among themselves. The living organism, that is, is looked upon as simply one physical object reacting with others, except that its reactions are typical of "life". And here we find a further factor, in itself trivial, but which becomes of profound importance in this quasi-philosophical development of that original form which has already been acquired by realism.† For the percipient is now perfectly familiar with the general principle that effects vary, not only with the character of the specific object which is their cause, but also and equally with the relations between this object, *which in itself remains absolutely unchanged*, and other objects. He knows, in other words, that all effects are determined by two sets of conditions: (*a*) by changes in causal objects, these relevant

* *Cf.* p. 38 *ante*.

† As already detailed to the end of Chapter V.

relations then remaining constant, and (*b*) by changes in these relations, the causal objects themselves remaining constant.* It is important to observe that this constancy in the character of the causal objects is a matter, in the first instance, not of inference nor assumption, but of direct and unimpeachable observation, which speedily develops however into that logical necessity on which depends the correct interpretation and forecasting of all experience. A vast range of phenomena, that is, can be adequately explained only if some of the objects concerned therein are regarded as absolutely invariant while their interrelations alter ; unless this principle of invariant causal objects holds true his practice and science alike fall to the ground ; † and again, as before, this standpoint is confirmed, though not primarily established, by social intercourse.

All this, as has already been remarked, is commonplace ; nevertheless its epistemological significance is vital. For it means that the percipient, whether scientific or not, has now discovered the general logical necessity of relating varying effects to those invariant objects which cause them.(5) He finds no difficulty whatever therefore in extending this principle, when the occasion arises, to the sense-organs as the locus of varying effects similarly produced by *invariant* physical objects. And this further development, it is now essential to notice, has occurred entirely within the range of *sensed content.* There has as yet arisen no necessity whatever to distinguish between this sensed content and the real object itself ; the latter is, in many of the instances upon which this whole body of experience primarily reposes,‡ directly and immediately observable in its invariance, its qualities being those which are sensed.(6) An unconscious but none the less irrefutable logic has hitherto impelled the naïve realist to distinguish between an " appearance " and a " reality " which are *both* equally sensed ; the two categories differ only in the

* That these two groups of conditions are frequently combined is here irrelevant. It is their distinction which is important.

† *Cf.* again the importance of perceived coincidence in scientific observation, p. 27 *ante.*

‡ *Cf.* again p. 27 *ante* on scientific experiment.

mode in which they are interpreted—the former still remaining subordinate to and significant of its dominating associate factor.*

All this may be summarized by saying that the naïve realist's sensed world thus attains a still higher level insofar as it logically acquires this causal aspect or basis. Objects are now no longer found to be merely *empirically* invariant; they become regarded as *necessarily* invariant also, even when direct observation is impossible. For the experient has already, while still ignorant of theoretic causation, achieved a world of invariant reality.† This now becomes still further systematized by acquiring a specifically causal character, while the sphere of empirical appearances, already inherently significant of reality, likewise finds this innate significance enormously expanded. For it is significant, no longer simply of real objects, but equally of their changing interrelations. The diminutive target, *e.g.* the foreshortened green and the lessening ball come to imply, throughout all their innumerable phases alike, incessantly varying physical relations between unchanging real things.

Thus far then, if the foregoing lengthy analysis is correct, naïve realism has shown itself to be, not merely "instinctively" or "intuitively", but logically coherent, although its logic has never been cast into any formal or explicit system. It has—unconsciously or automatically—evolved several ruling principles of capital importance—independent existence, materiality, appearance, causation—all resting on the one general foundation of an unqualified identity between physical reality and sensed content.‡ There are involved neither the "sensations" of the Scottish Commonsense school and the Mills, nor the "essences" of the modern Critical Realists, nor the distinction between "external objects" and "sense-presentations" of Stout, realistic though this is.§ This quasi-logical foundation, however, has not yet been confronted by any definitely epistemological issue; but now Stout's question must be

* *Cf. ante*, pp. 55, 56. † *Cf.* Chapter V.
‡ *Cf. ante*, p. 65. "Sensed", in principle, includes sensible
§ *Ante*, p. 62.

faced—" how it is possible for the sensum to vary without corresponding variations in the external object which we perceive " ;* and these realistic conclusions must be applied to the theoretic problems of perception and knowledge.

Thus the experient passes from adolescent naïvety to philosophic manhood. He must now take himself—his own consciousness or awareness—into account, and determine its exact relation both to the material world and the correlated processes in sense-organs and nerves ; and we may remind ourselves that Stout maintains that the original unqualified identity between sensed content and reality must then be profoundly modified. I shall endeavour to prove, on the contrary, that this principle, when truly formulated, is foundational for modern Realism.

REFERENCES TO CHAPTER VI

1 (P. 60). Soddy, " Atoms and Molecules ", *Nature*, vol. 104, pp. 230, 231. *Cf.* Cisar in *Mind*, vol. xxxiii. p. 4 : " percept must comprise atoms, electrons, *etc.*, . . . genuine objects of possible sense-experience " ; and contrast Holt, *The Concept of Consciousness*, p. 116.

2. (P. 61). Pp. 387, 404. *Cf.* also p. 395 : " we cannot identify (the extent of the thing seen) with *any one* of the variable extents of the sense-presentations ". Italics mine. On my use of " sensed content " for " sensum ", *cf.* p. 18 *ante*.

3. (P. 61). " Kant, in the earlier stages, postulated a difference between the existence of an object and the existence of its representation. . . . Between subjective states and things in themselves stands the phenomenal world, the representative in consciousness of (the) noumenal realm " (Kemp Smith, *Commentary to Kant's Critique*, pp. 318, 374 ; abridged). " A system of relations between the realities, unspatial, inaccessible to perception, and purely intelligible, (is) the fact which lies at the root of our spatial perceptions. When these objective relations are translated into the subjective language of our consciousness, each of them finds its counterpart in one definite spatial image. . . . Every particular feature of our spatial perceptions corresponds to a ground which there is for it in the world of things " (Lotze, *Metaphysic*, vol. i. pp. 263, 258). Whether this view exactly accords with that of Plato appears doubtful. Dawes Hicks maintains that it does

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* *Mind, loc. cit.*, p. 399.

(*Proc. Arist. Soc.*, vol. xiv. p. 18), while another able student of the Greek philosopher holds that " space, which we tend to associate only with the world of Becoming, in a sense belongs also to the eternal world of Being; for it represents the eternally existing law of nature which ordains that the unextended must necessarily manifest itself in the form of the extended. It is recognized to be a necessary law of the existence of Mind that it should manifest itself always under the conditions of space and time " (Gaye, *Platonic Conception of Immortality*, pp. 189, 138).

4. (P. 64). By " instinctive ", in this connection, I mean essentially reflex, unreasoning, just as animal instinct is. An " implicit " ground, on the contrary, is one that was originally arrived at rationally, and then adopted as a conclusion without its detailed basis remaining definitely in consciousness. This result, of course, is characteristic of all thought as part of its economy and efficiency. Further, implicit grounds can in principle be rendered explicit whenever circumstances demand this.

5. (P. 65). Strictly, of course, this object is only a single factor in the entire causal situation. But this again is irrelevant. For epistemology, as compared with physical science, all the importance is centred here on the invariant object.

6. (P. 65). Strictly, as a factor in perception. But here the point is that there is no duality at all presumed between the qualities sensed and those of the object. It may clarify my meaning to quote Alexander: " these sensa (sensed contents) are elements of the thing itself. There is nothing behind them; they are realities " (*Mind*, vol. xxxii. p. 6). I am still concerned with the naïve realist here; often he is a scientist also.

CHAPTER VII

SENSED CONTENT AND ORGANIC CONDITIONS. THE MAIN TYPES OF APPEARANCES

1. At this stage it is necessary to notice once again that every theory of knowledge without exception must begin from some form of naïve realism which approximates to that which has just been analysed. No theorist begins as a consistent neutral, or like a judge who knows nothing in advance about the case. He is rather in the position of counsel who must attack or defend a position already accepted and acted upon, even though not finally established; he himself is infected with the original sin of naïve realism. This consideration cannot but influence our procedure. For it necessitates that we inquire in what way naïve realism must be retained, or adapted to meet difficulties as they arise, instead of beginning with a number of facts in themselves indifferent, and creating from these some perfectly new theory. The doubt of Descartes *e.g.* was directed upon ordinary experience; and few later thinkers have adopted such a purely geometrical starting-point—without parts and without magnitude. At the outset of its metaphysical pilgrimage, says Kant, "human reason . . . begins with principles which cannot be dispensed with in the field of experience, and the truth and sufficiency of which are, at the same time, insured by experience".* This does not, of course, presuppose the truth of naïve realism. Rather the contrary; it merely asserts its existence as the form actually taken by the unreflective attitude—as the noetic system whose analysis and criticism must remain the dominant feature of all

* *Critique of Pure Reason*, Preface first edition (Meiklejohn).

subsequent theory until its amendment has been proved to be altogether impossible.

In considering then the correlation between sensed contents and organic processes, it must be admitted that the former vary "*as if* not only their appearance, but their nature and existence were inseparable from such bodily conditions". This suggestion, that is, is certainly a logical possibility—"a possible alternative which may also be made to fit the facts".* But here the fundamental principle of minimum hypotheses has its application; and it operates in favour of realism. For until this system has been proved finally incapable of assuming coherent philosophic form it is something more than a "possible alternative". It enjoys a certain precedence; it holds the field and stands on its defence; and "possible alternatives" can be advanced—logically—only after it has been adjudged incapable of managing its own affairs. For alternatives, as such, may be multiplied endlessly. *Primâ facie* the tides *may* cause the moon's motion and the sun *may* revolve around the earth; the "as if" applies in both cases. Similarly, not only *may* there be a realm of Kantian things in themselves, but behind this, and sustaining it, there may be an infinity of others. Thus the properly logical procedure is to inquire how realism, although beginning as thoroughly naïve, and then assuming the aspect definitely formulated in the previous chapter, can further adapt itself to the facts which govern the phenomena of consciousness and knowledge. Without going beyond the realm of sensed (and sensible) content—without postulating any existents except such as are perceived (or perceptible) (1)—independent physical objects, we have thus far found, are regarded as causing changes in sense-organs and nerves. What now is the precise relation of this causal system to the phenomena of awareness?

In the first place the question of the legitimacy of applying the category of causality to these phenomena must here be excluded as one that cannot, as yet, present itself to the realist. It is quite sufficient, from his point of view,

* Stout, *Mind*, vol. xxxi. p. 388. Italics mine.

to be able to trace still further those invariable correlations with which he is already acquainted in the external world, without any reference to the precise nature of the entities between which these correlations subsist. Beginning therefore with the basal connection between awareness and organic processes, it is perfectly logical to extend the previously established principle that varying effects are caused by invariant objects, provided that the subsisting interrelations vary, from these organic processes themselves to the associated processes within consciousness ; for, from the realistic standpoint which regards the organism as one invariant object in changing relations to others, this already holds true as regards the changes in the sense-organs.* It is to be expected therefore that the same result will occur in the sphere of consciousness ; some correlated changes there must be, and the only remaining question is—what is their exact nature ?

From the very character of the problem which has thus arisen, one suggestion seems to be negatived from the outset. The invariant character of physical objects,† already established, as it is in great degree, by direct perception itself, can be abandoned only at the cost of destroying the entire causal schema. Further, the changes which are now being investigated are—again by the conditions of the problem—restricted to consciousness itself, as effects produced within its sphere. They cannot therefore, without confusing the whole issue, be regarded as affecting their own causal origins in the physical sphere ;(2) yet, as sense-awareness itself again testifies, the resultant changes undoubtedly appear to extend into the objective world so as to constitute its constantly fluctuating appearances.

Thus the long-familiar distinction between reality and appearance, hitherto unquestioningly accepted as an indelible character of all experience which, however curious in itself, still occasioned no practical difficulties, appears when considered theoretically in its connection with con-

* *Cf. ante*, p. 64. For a further discussion of Causation *cf.* Chapter XIII.

† Apart of course from physical causes which modify this invariance.

sciousness to lead to a direct contradiction; for changes which should logically be confined entirely within consciousness patently manifest themselves within the external world and give rise—again theoretically—to all the ruling "isms" of philosophy. Is it at all possible, consistently with the maintenance of realism, to solve this contradiction? If we continue our analysis of the relations between the organism and its environment, taken together with the essential nature of consciousness itself, I believe it is possible.

2. I shall begin with the physical aspects of the sense of vision as illustrative of these general relations. The dimensions of the retinal image—the extent of the stimulated area—vary directly with the real size of the stationary physical object when this is completely sensed—that is, fully seen; exactly as with a camera plate, the greater the real size, the greater the optical image; and taking awareness also into account, the sensed size (sensum) varies directly with the stimulated area. Thus there exists a direct correlation between real sizes, retinal images, and sensed sizes.(3) Further, and again in accord with the laws of optics, moving the real object away from the eye reduces the retinal image. But since the sensed size varies with the image it also must—logically—diminish as the real object recedes, exactly as it would do were this object itself, while stationary, to become smaller.(4) That is to say, the modification of the image and of the sensed size is in both these cases alike the result of a real change in real physical conditions all themselves sensed (or sensible); so that there is no necessity to postulate unsensed realities, and the sensed content retains, throughout the modification, its original character of sensed reality. For it is, both in itself and as the outcome of the changing image, correlated in the two cases with objects equally real—in the first with a receding object which retains its original size, and in the second with a stationary object which diminishes in size. In the latter instance, however, sensed size and real size remain identical; * but there is no logical reason to suppose that this existential identity, which sur-

* *Cf.* p. 87, n. 3.

vives throughout one set of changing physical conditions (*i.e.* the real diminution) must perish and give way to an existential duality in face of another set of conditions similarly physical (*i.e.* the real recession) and correlated with a sensed content of exactly the same character. If this content is identical with physical reality in one case (diminution) it must be similarly identical in the second case (recession). This result, it will be noticed, is the reverse of Stout's position ; for he maintains a persistent duality in place of identity—the sensum is not " identical with *all or any* of the external factors ".*

At the same time, and despite this perennial identity,† a distinction between these cases is made even by naïve realism ; for the reduced size which is sensed is the " real " size of the diminished stationary object, while it is the " apparent " size of the object that has moved. Before proceeding to consider the basis of this distinction, however, it is essential to note that it always remains ‡ a distinction within the sphere of directly sensed reality ; it does not imply—because no ground has yet arisen for such an implication—that sensed content is ever categorically different from physical existence ; both the " real " size and the " apparent " size alike are sensed qualities of the physical object. The significance of this I shall consider shortly ; but in the meantime the bearing of the specific instance just dealt with upon experience generally must be elucidated. For the phenomena of size are exactly paralleled by shape, intensity and colour, although as we pass from qualities susceptible to exact quantitative measurement and comparison our difficulties naturally increase. But in precisely the same way, a really circular plane *X* held obliquely produces an elliptical image on the retina (as on a camera plate), and the sensed shape varies with the shape of the image ; while a really elliptical plane *Y* directly before the eye produces a similar image and similar sensed shape. But in the case of *Y* the sensed shape is (naïvely) the real

* *Ante*, p. 61.
† Excluding hallucination, which has not yet come into consideration.
‡ Again excluding hallucination

shape—the two are identical—and there is again no logical reason to abandon this existential identity and substitute a duality when a similar sensed shape becomes correlated with *X* held obliquely. Once more therefore the realist quite consistently maintains the identity unimpaired and falls back on the distinction between real and apparent shapes, both being sensed and both equally physical.

It is unnecessary to consider in detail instances of intensity and colour; they, and others analogous to them, may now be subsumed under the general principle governing all these phenomena. This may be expressed as follows. Excluding illusion and hallucination, every sensed content which is regarded as an existentially real physical quality may, by suitably modifying the external physical conditions, be exactly paralleled or duplicated by a sensed content judged to be appearance. But this modification of physical conditions cannot logically be supposed to destroy the existential identity and convert it into a duality, because the fundamental correlation of object, organic modification, and sensed content remains altogether unaffected. Whatever grounds exist therefore for this identity—and we have seen that realism certainly has such grounds which, though pragmatic, have not thus far been logically subverted—still hold good. Sensed content remains therefore in veridical perception identical with physical reality; * and the only alternative is to hold, with Stout, that this identity never occurs under any conditions whatever.

3. One source of confusion may still remain. It must be observed that the issue turns, not on perception as such, but on the character and function of *sensed content* within perception. All realists alike—Stout and Alexander, Critical and Neo-realists—agree that physical objects are, as a matter of fact, directly perceived; their differences concern the ontological nature of, and the part played by, sensed contents; and this feature of the controversy bears very closely on the character and validity of the realist's distinction between reality and appearance as presented

* Alexander " asserts that sensa are identical with perceived features of physical existence " (*Mind*, vol. xxxi. p. 386).

in what precedes—both alike being physical and both sensed.

On this point there exists a radical misapprehension of the naïve standpoint which, by analogy with the familiar psychologist's fallacy, may be called the " epistemologist's fallacy ". The epistemologist, that is, has always given to the naïve realist's distinction a theoretical interpretation of his own, and has then, altogether unjustifiably, read this speculative interpretation backwards into naïve experience. This procedure however is wholly unwarranted. For in the philosophic theories of knowledge " reality " and " appearance " have come to denote two different *modes of being*—two fundamental subdivisions of all existence ; the distinction, that is, is *ontological.* But this is by no means its character within ordinary experience, simply because the unreflective percipient knows nothing whatever of ontology. He certainly employs such crude and patent classifications as mind and matter, or psychical and physical, which prove adequate to his demands ; * but he never imagines the possibility of there being contrasted or opposed levels and modes of real existence ; he discovers such subtleties only when he learns something of philosophy. His own criterion then between " reality " and " appearance " is not theoretical but pragmatic ; not ontological but validatory.† It is a test, not of the presence or absence of two mutually exclusive species of reality, but of the degree in which one and the same sort of reality either exists, or is apprehended as existing ; and it has reference not to pure knowledge but to practical activity. In all prephilosophic experience therefore " real " means primarily what is actual in the sense of being genuine, true, complete —not imaginary, fictitious nor counterfeit ; and since duration is almost a universal attribute of genuineness, " real " becomes largely equivalent to persistent, enduring, permanent.

The transition from this latter meaning to philosophic usage is obvious ; but here the theoretic emphasis—quite naturally—comes to be placed on the general but abstract

* *Cf. ante,* p. 44.

† *Cf. ante,* p. 31.

quality of persistence as such, to the exclusion of the concrete characters of practical life; and thus there arise those abstract ontological issues which, as I have just observed, are totally foreign to naïve experience. Naïve "reality", however, has no direct reference to the relation between objects and consciousness,* or their ultimate nature as manifestations of Being; it concerns merely the relations of objects to one another. There is always present an implicit ruling practical standard, loosely coherent and far from being thoroughly systematic, which is "reality" in its various aspects; and every thing or quality that diverges from this standard is "appearance". But both "reality" and "appearance" are equally actual and similarly existent,† and, as such, are always identical with sensed qualities—sensed content or sensa; and this principle is not affected, as has been remarked already, by being supplemented with the imperceptible entities of Physics and Biology; for, just as before, the microscope and spectroscope reveal their own "realities" and "appearances".‡

I have already endeavoured to show that the general nature of this real standard is determined by the entire course of experience itself, which creates and maintains it almost unconsciously and automatically.§ It is only necessary therefore to exhibit the bearing of the conclusions just arrived at with reference to its pragmatic character, as contrasted with its theoretic epistemological interpretation, upon my argument as a whole. As I have pointed out at the opening of the present chapter, naïve realism forms the starting-point common to all our theories alike; each must either confirm or modify or repudiate its implicit principles, and in so doing usually claims that it conserves physical reality and provides an adequate explanation of its character. My own analysis shows that so far as the problems of sensed content are concerned these principles, when explicitly formulated, prove to have a sound logical

* Except in the crude "appeal to the senses" which again is a thoroughly practical test.

† Still apart from illusion and hallucination.

‡ *Ante*, p. 70 n. (1).

§ *Ante*, pp. 53 *sqq*.

foundation and to afford ample ground for retaining the view " that (sensed contents) are identical with perceived features of physical existence ",(5) even after all the facts of the correlation between conscious and organic processes have been considered ; and still further that the distinction between appearance and reality also remains unaffected, and can be applied therefore in complete logical agreement with this existential identity between sensed content and physical qualities. For the epistemological interpretation of this distinction is simply a theoretic distortion of its primary pragmatic character, inasmuch as it applies it to ontological categories with which it is never practically concerned, and which it is not logically necessary to introduce at all as a ground of explanation. There is therefore no epistemological necessity whatever to abandon the principle of directly sensed physical reality, by comparison with which there exist appearances which are also directly sensed ; no theoretical necessity, in short, to postulate, with reference to the relations either between conscious and organic processes or between reality and appearance, any such duality between sensed contents and physical existents as is maintained by Stout and the Critical Realists.

4. I shall now suggest a classification of the various kinds of appearances ; for all the instances hitherto dealt with are cases in which the appearance and the reality are perceived as existentially identical. There occurs neither duplication nor dissociation, and the sole difference is simply one of completeness or fullness—of the degree of divergence from the norm of reality. As Alexander expresses this, " these apparitions are elements of the thing itself. There is nothing behind them ; they are realities ".* But his explanation of the phenomena in question by " selection ", either by the mind of the observer or the physical medium of transmission,† is rather unhappy, because too metaphorical ; it implies that whenever an appearance is apprehended some special agency is active which is inactive when a reality is cognized ; this naturally

* *Mind*, vol. xxxii. p. 6. *Cf. ante*, p. 52.
† *Ibid.*, vol. xxxi. p. 400.

lends support to the view that appearances are fictitious, whereas (as I have argued throughout) the final result is due in both cases alike to the ruling physical conditions. Appearance therefore is in no way exceptional; both it and reality are equally natural; and if this is admitted the terminology becomes of minor importance. This consideration applies also to Alexander's designation of these phenomena as "real appearances"—"appearances supposed to be partial but not distorted".* "Real appearances" is a term which leaves room for some confusion, since it tends to subordinate the essential distinction between "reality" and "appearance" and suggests in some degree a contradiction like "a round square". I shall myself refer to them as "natural appearances" to imply that, ontologically and epistemologically, they are on the same level as natural reality, from which they differ only in the completeness or fullness of their sensed characters.

It will be helpful to adhere to Alexander's general classification of appearances, and to consider here those he has called "mere appearances". In these there is not only "selection" but also "distortion"—"instead of the external object something else is substituted more or less different from it"; † they include phenomena mainly of refraction and reflection. But although these present greater difficulty than my "natural appearances", they still imply no *ontological* duality between sensed contents and physical existents; the dissociation and duplication which occur constitute merely a *natural*—physical—duality which is best explained by reverting to the correlation between physical objects and organic processes.

We have seen that every organic change produced by a real object may be duplicated by some other real object if the physical conditions are suitably modified,‡ with—necessarily—a correlated duplication of the sensed content. This content itself cannot—simply because of its precise duplication—enable us to distinguish between reality and

* *Ibid.*, p. 399. *Cf.* p. 405: "though selected from the whole nature of the thing perceived they are not otherwise altered".

† *Ibid.*, p. 406.

‡ *Ante*, p. 74.

appearance; that distinction is the result of a higher conscious activity. We may regard a sensed content as either a gnat on the window or a plane in the air—either a loud noise at a distance or a low noise close at hand; * but this perceptive judgment does not alter the character of the sensed content itself. To extend this phenomenon of duplication is now a simple matter. For whenever any physical conditions affect the sense-organ in the same way as is done by a real object there must be aroused an awareness of precisely the same sensed content; and this obviously occurs in every case of reflection of light, colour, sound and heat; and again a more instructed judgment interprets these not as any kind of psychic entities, but as appearances of real physical qualities which are themselves capable of being directly sensed under proper conditions. Mirrored qualities are thus duplicated qualities of real objects, and, because duplicated, are appearances; the duplication further implies, however, a duality between reality and appearance which is absent in all "natural appearances". But this duality, once again, is not an *ontological* duality; it is not the peculiar result of the physiological or psychical conditions of *knowledge*; and it implies therefore, not two different modes of real being, but a duality in the sensed physical world which is wholly due to physical conditions.† The reflection, while real *as* a reflection, is an appearance which necessarily implies an immediately sensed (or sensible) real object; and this duality between object and reflection—between physical reality and physical appearance—in no degree implies a duality between physical object and psychical sensed contents.

The same argument, in principle, applies to refraction. Physically, this is analogous to the reflection of the real object when this itself is not within view; so that when

* I was once puzzled for a long time by an apparently loud sound which I attributed to aeroplanes, but which proved to be a low buzzing in a water pipe in the wall.

† This explanation agrees in the main with Alexander's position (*Mind*, vol. xxxii. p. 8), but I have allowed my own statement of the case to stand in its original form.

we perceive the refracted appearance we cannot (at the same moment) perceive the reality; whereas with a mirror we may (under proper conditions) perceive both simultaneously. Again the sensed content is dissociated from the real object. But it by no means follows (as Stout contends) that because, under certain physical conditions, one indispensable factor of which is a real object, some of its qualities become sensed as duplicated or dissociated, therefore *all* sensed qualities are *always* existentially distinct from physical reals.* On the contrary these duplicated contents are themselves conclusive evidence of the basal existential unity, insofar as, when sensed in duplicate, they irresistibly revive the consciousness of all their associated qualities and result in the perception of an object which is judged *primâ facie* to be real. That this judgment is found, with fuller knowledge, to be inaccurate no more necessitates a duality between sensed content and physical existence than my misreading of a man's character implies any existential duality between himself and his personal attributes. Similarly, the duplication when one eye is pressed out of its normal position is analogous to one and the same real object being perceived simultaneously by two separate individuals; each eye becomes, for the nonce, an independent observer of one common world; while the resultant motion of objects when the eye is moved about is paralleled by the motion observed in our surroundings when walking.

Closely connected with this spatial dissociation of sensed qualities is their temporal dissociation, exemplified in the time at which sound and light are actually perceived as distinct from the time of their real existence. To an infinitesimal degree this type of dissociation is always present as the interval occupied by the transmission of the organic processes. But there is no difference in principle between perceiving a quality *where* it really is not and perceiving it *when* it really is not; the question is whether either phenomenon necessitates any dualistic theory of psychic sensed content and physical reals. In the case of

* *Cf.* quotations *ante*, p. 61.

spatial dissociation I have just argued that the phenomena, far from implying dualism, are themselves evidence of the principle of existential identity. For they only occur in actuality, and they can only be explained theoretically, in invariable connection with phenomena which fall within the category of directly sensed physical reality ; here again such duality as does arise is not ontological but physical. In order to keep this physical reference in mind I would suggest that what Alexander calls " mere appearances " be referred to more precisely as " duplicated ", " spatially dissociated ", and " temporally dissociated ", as the case may be.

It is sometimes argued that we can have no absolute criterion which distinguishes appearances, taken in themselves, from reality ; and that reality may therefore never be other than one of the many appearances, conventionally selected from among all these for merely practical purposes devoid of theoretical grounds ; the illusory object, it may be said, is otherwise indistinguishable from the real object. This objection however overlooks the fundamentally important fact that only a small proportion of the total qualities of the real thing can be either selected or duplicated at any given time—the shape of the immersed stick, the size and colour of the distant hill, the visible qualities of the mirrored object. This obviously accords with the general principle that all appearance, as such, is partial reality ; * but the wholeness of reality, in this connection, must be recognized as always involving systematic unity ; and it is the breach of this essential unity, not merely quantitative or numerical partialness, that determines appearances to be appearances. If the immersed stick not only looked crooked when viewed from all points above the surface, but also looked crooked in precisely the same way from below the surface, and further felt crooked, then it would be true that we should have no criterion, or at least no satisfactory criterion, between appearance and reality ; and the same would be true if not only the visible qualities, but equally the tangible qualities, of an object

* *Cf. ante*, p. 51.

could be mirror-reflected—if *e.g.* a mirrored orange smelt and tasted and felt like an actual orange. If, in short, the real object were, *per impossibile*, duplicated throughout its entire nature, and so presented to perception, neither naïve realist nor philosopher would have any alternative except to regard the duplicate as another object equally real, to be coordinated with its environment just as before. But this, of course, never occurs ; the realist's object is thus a unified complex of qualities—a systematic or permanently organized quality combination ; and it is precisely the proportion of the apparent qualities to this entire complex that constitutes the ultimate criterion of their ontological status ; the greater this proportion, therefore, the more difficult it becomes to distinguish reality from appearance, as in the case of echoes and sounds transmitted by wireless apparatus.* This view accords in the main with Alexander's. " When images fail to fit in within the one portion of space-time with veridical sensations, they are distinguished as being *only* images. If they were wholly veridical, the distinction would perhaps not be made. The image would be a perfect substitute for the sensory appearance ".†

In many instances, still further, the systematic unity of the real object involves the constancy of its character as a whole ; and then every departure from this constancy at once indicates appearance. This applies to the case of the locomotive whistle. Its " real " whistle is that which is heard by an observer who is stationary relatively to the engine, because, under those conditions, it remains fairly constant and unchanging ; but if, *with the same conditions*, the engine gave now a long, then a short, now a loud, then a low, whistle, then there could be no " real " whistle, because no invariable correlation with the entire complex—a case which actually occurs in lustred silks and similar fabrics.(6) It must be remembered here that this constancy of the real bodily complex is one basis of our permanent

* " Naïve realism " (once again) " is not quite so naïve as it is supposed to be. It is critical, although never sufficiently so " (*ante*, p. 31).

† *Space, Time, and Deity*, vol. ii. p. 219.

self-consciousness ; * and if it is rejected then our " real " personality tends—so far—to disappear ; we become merely members of the " ballet of bloodless categories ", or perhaps of " the choir invisible ".

But the partialness of appearances is best perceived in the varying shape and size of objects when seen from different positions. Here the apparent qualities are obviously portions of the real—they can all be included within the latter, or all, as it were, " cut out " of this as paper patterns are cut out ; or in more general terms, " when a number of appearances presented themselves, that one was real which contained the others " †—which was, in short, inclusive of all its fellows.

The contents of sensory hallucinations constitute a distinct psychological group, intermediate between those mere appearances just considered and the purely psychic contents of memory, imagination and imaginal thought. In hallucination awareness is determined completely or predominantly from within the organism ; but even here there is a connection with extra-organic reality, for both the apprehended contents and the correlated processes are specifically determined by previous experience of that reality. The result is best regarded therefore as intra-organic duplication or dissociation ; and from that standpoint it becomes a further valuable witness to the underlying existential identity of *normally* sensed content and physical reality, since it finds in this principle its own adequate explanation.

But in hallucination there is present more than dissociation—there is a difference in the nature of the content, which removes it from the category of physical existence to that of mental or psychical. It is akin to the content of an exceptionally vivid memory or imagination, and this shades off imperceptibly into the content present in normal imagination and in imaginal thinking. In itself hallucinatory content lacks the definiteness, clearness, vividness, universality and constancy which characterize those physic-

* *Cf. ante*, p. 54.
† J. W. Scott, *Proc. Arist. Soc.*, vol. xvi. p. 99.

ally dissociated and duplicate appearances just dealt with—Alexander's " mere appearances " ; and instead of being, like these appearances, coherent with wider experience, they are in patent contradiction to it.

In all illusory appearances, as defined by Alexander,* we have a case intermediate between dissociated—" mere " —appearances and hallucination. Awareness is here determined simultaneously by external reality and by intra-organic activity ; and these operate in varying proportions so that sometimes one is predominant, sometimes the other. Their elucidation therefore depends on the details of each separate case ; but since the explanation is then a composite one, uniting the features of the various types already outlined, it can obviously never furnish any proof of existential duality.

Finally, is it possible to say more definitely what that directly sensed content is which, as I have maintained throughout, we may regard as in a true and final sense " real " ? By what method is it selected from the incessantly fluctuating totality of sensed content, inseparably correlated as this is with organic processes ?—this last feature being (as has been seen) the ground of Stout's duality between all this content and physical reality. This question has already been dealt with in principle.† The real norm is unconsciously generated and maintained by the course of experience itself, and equally unconsciously accepted and employed. It is pragmatic, not theoretical ; an everyday standard of completeness, not an abstract criterion of pure being. For of his own cognitive activities the individual has as yet nothing but the most superficial knowledge ; the problems of epistemology therefore, together with the allied questions of the relation between the percipient and his world, cannot yet have arisen in his mind. He stands at that blissful stage where objects present only the practical difficulties of using them to the best advantage, although of course the transition from this

* " An illusion is due to what occurs within the sensitive organism ", as in colour contrasts (*Mind*, vol. xxxi. p. 410).

† *Ante*, p. 55.

pragmatic standpoint to a theoretic interest in knowing itself and in the nature of existence is both inevitable and natural.

What immediately concerns us here, however, is that this pragmatic norm is always, to begin with, directly sensed; no other mode of awareness is competent to reveal its existence. It is true that it is not sensed as "real"; nevertheless all that is physically real must be, originally, sensed.* This implies no contradiction; it simply means that though the real is sensed, a higher conscious activity must operate before it is *known* as real; pure sensing, in other words, cannot yield the *category* "real". But a circle is the sensed real shape of a florin, a square that of a small die, when held directly before the eye; and these may be modified—and again as sensed—into ellipses and rhombi. "Real" colours are also immediately sensed—the blue of the sky and the white of snow. The edge of a razor is sensed as straight, the horizon line as level; sweet is the real sensed taste of sugar, just as the real odour of chlorine is sensed. The more exact and constant standards of length, area, volume and weight simply demand more definite sensed content. The inch or decimetre is a certain real sensed length as viewed at the most practically convenient distance from the eye,† and from this the larger standards of extension, mass and weight are constructed, at first sensibly, and later conceptually. Thus the real standard or norm gradually becomes more and more complex. Its constituent factors are separately determined, and then associated until they constitute an intricate but unified system which is employed with automatic accuracy throughout the whole range of experience in a manner best explained by Stout's principle of noetic synthesis. This "association", however, does not imply any theory of separate atomic contents which are put together to form the objects of developed experience; it signifies the progressive analysis, and increasingly definite synthesis, of a

* Except the scientific imperceptibles—molecules, *etc.* But these are analogous to sensed existents.

† *Cf. ante*, p. 24.

body of content which is primarily undefined.* These considerations provide an adequate solution of the problem with which Stout confronts Alexander's realistic theory. "If this tiny bit" (*i.e.* sensed content) "is all that is primarily known, how are we to pass from it to a knowledge of the rest"? † We do so because our experience of "this tiny bit" is a living dynamic activity, incessantly expanding itself, while it also reduplicates itself, in imagery, idea, thought and reason. Sensed content may be a "tiny bit"; but so is every living germ-cell, so was the primal germ of all life and consciousness. Sensed content must undoubtedly become infinitely supplemented; none the less, it is our experience of sensed content as physically real which generates the means and material for its own incessant transcendence; and both for the ordinary observer and the scientific investigator ‡ it constitutes one final test of the real existence of the external world. Any further discussion of appearance and reality would involve the analysis of each separate instance—a tedious undertaking. I believe I have presented all the fundamental principles; and having thus concluded my positive explication of Direct Realism and given it some measure of philosophic form, I shall now consider the current alternative theories and endeavour to show their defectiveness as realistic systems. My criticisms may then provide negative evidence for my own position.

REFERENCES TO CHAPTER VII

1. (P. 70). With the essential proviso, however, that their qualities are those directly sensed. *Cf. ante*, p. 65, n. (6). The imperceptibility of molecules, ether, *etc.*, is an irrelevant, because non-epistemological, point here; it is an additional character of the sensed material world.

2. (P. 71). It must be remembered here that the patent dis-

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* *Cf.* Ward's theory of the continuous differentiation of the presentation continuum.

† *Mind*, vol. xxxi. p. 390. I consider the suggestion that some idea of the whole is primary in connection with Kemp Smith's position in Chapter IX. *Cf.* also p. 94.

‡ *Cf. ante*, p. 27.

tinction between physical and mental, material and psychical, objective and subjective, has already established itself within realism, although its basis is pragmatic rather than theoretical; the realist is perfectly entitled therefore to apply it here. *Cf. ante*, p. 44.

3. (P. 72). "Real" size and "sensed" size are, for realism, under certain conditions identical; but here they must be *theoretically* distinguished, since it is their precise relation—their identity or duality—which is the point at issue.

4. (P. 72). The image might also become fainter in the first instance than in the second; but this is irrelevant, since we are here restricting our analysis solely to size.

5. (P. 77). *Mind*, vol. xxxi. p. 386. (Alexander's position.) The naïve standpoint, in other words, is never (in principle) a case of "mistaken identity"; sensed content is not merely identified with, but is further actually identical with, physical attributes and entities.

6. (P. 82). Parallel instances are the sounds of the waves and of the wind; they have no single "real" sound because constancy of character is largely wanting. Similarly, a vacillating individual is said to have no "real" personality; in both cases the criterion is the same.

CHAPTER VIII

A CRITICISM OF PROFESSOR STOUT'S REALISM.*

1. Professor Stout's realism, already discussed in various incidental aspects, may be summarized as follows. "I take the existence of the physical world for granted. We are concerned only with the question how we know it in sense-perception. (The) contents of immediate sense-experience must not be confused with our knowing about them. They are not subjective. They fall on the side of matter and not of mind. (Yet) I deny that sensa are identical with perceived features of physical existence." † I have already dealt with the correlation between sensed contents and organic conditions, together with the associated distinctions between reality and appearance, and have maintained that all these are quite consistent with the existential identity here repudiated. It only remains then to consider his further arguments in support of his general standpoint.

Against Alexander's contention that the repudiation just referred to reduces the objects of perception "to a world of consistent hallucination" Stout posits the material character of sensed contents as affirmed above; for although not identical with perceived physical existence they are none the less themselves material; if this were not the case "we should not even have the thought of such a (material) world so as to be able to raise the question whether it exists or not". ‡ This is the basis therefore of Stout's whole position; and it raises immediately a number of difficulties.

* The following passage occurs in Kemp Smith's *Prolegomena to Theory of Knowledge*: "Stout has now broken with representationism much more completely than in any of his published writings" (p. 68).

† *Mind*, vol. xxxi. pp. 385, 386. *Cf.* further *ante*, p. 61. For "sensa" I shall throughout use "sensed contents" both in quotations and in the text.

‡ *Mind, loc. cit.*, p. 389. *Cf. ante*, p. 22

One of these has already been noted by Alexander: "how if the size and the shape of the sensed contents depend on the retinal excitement, can (they) be on the side of the material object and not on the side of the mind?" * Further, this duality between sensed contents and physical features necessitates two classes of material entities, one of which is sensed but never perceived, and the other perceived but never sensed;† while for Direct Realism whenever real qualities are perceived they are at the same time sensed. From the latter point of view their temporal durations are identical; they come into existence, and they cease to exist, together, simply because they are always one and the same; but from the former this is impossible; the existence of one of Stout's material modes therefore is determined by each individual mind—a sensed content does *not* "continue to exist when I cease to see it".‡ Yet, despite this intermittent existence, all sensed contents "are continued into and are of a piece with a wider continuum which comprehends and connects them as the physical universe comprehends and connects your body and mine".§ This analogy, however, cannot hold. For the factors of the physical universe are transformable into one another, and similarly with the forms of energy; there is here therefore no absolute cessation of existence. But in the case of sensed contents there must be an absolute cessation; for the dentist cannot "experience his patient's toothache. He can experience only his own".‖ There are thus an existential separateness and independence in the case of sensed contents which are absent in physical existents; each content-group forms a watertight compartment,¶ and this precludes both any wider presentation continuum in the true sense of this term, and that "continuous whole" which comprehends sensed contents and physical things within "the same order

* *Mind*, vol. xxxii. p. 8.

† *Cf. loc. cit.*, p. 394: "For each individual the material world has two parts." The extreme form of this contrast is obvious from the passages just referred to, p. 61 *ante*. *Cf.* Broad's similar later view, below, p. 175.

‡ P. 387. § P. 389. ‖ P. 391.

¶ P. 392: "he can hardly say that his sensing is literally identical with my sensing".

of being". It may be suggested that the sensed content becomes somehow transformed, whenever the percipient ceases to be aware of it, into a physical entity; but since this physical entity itself continuously exists, this view implies that it sometimes exists only in one form, and sometimes simultaneously in two forms, which is inconceivable quite apart from the *modus operandi* of the transformation itself.

A true presentation continuum, on the other hand, which is wider than that of any individual experient, must be presented to one single mind, just as the included continua essentially are—a condition akin to Berkeley's Divine Mind. But further, since the existence of this wider continuum depends solely on that of all the individual experients —" depends *directly and ultimately* only on the way in which the sense-organ is affected" *—any such wider mind is obviously impossible. There can be nothing more than a discontinuous and intermittent aggregate of presentations, distinguished from Hume's only by being internally continuous, instead of atomic. But this internal continuity itself, though certainly real, is of a peculiar character; it is an attribute not inherent in the sensed contents themselves, but conferred upon these by the sensing mind, thus closely resembling Kant's synthetic unity of apperception; mental therefore rather than material, despite the material nature of the content and its homogeneity with physical reality; for although " experience yields evidence of the identity of extension as seen, and extension as touched" (*i.e.* as perceived), " it does not in the least show that visual and tactual (sensed contents) are included within the same continuous extension".† Their continuity therefore can be only that resulting from their common presentation to, or their being sensed by, one mind; and this, together with their intermittent existence, makes it extremely difficult to accept their homogeneity with material reality.

2. The materiality of sensed contents however is the indispensable basis of Stout's realism, since apart from it " we should not even have the thought" of a material world.

* P. 404; my italics. † P. 403.

But if, for argument's sake, this principle is accepted, still when we turn from the nature of these contents to the manner in which our experience of them is related to our knowledge of the external world, equally serious difficulties present themselves.

Stout's treatment of this subject loses sight of the fundamental issue. He analyses the *nature* of knowledge, whereas our problem concerns, at bottom, the origin of knowledge—the mode of its primary development as such; the character of that earliest stage of experience which precedes knowledge itself and from which all knowledge evolves. This distinction is fully recognized, of course, by Stout in his reference to "the experience in which knowledge has its source . . . experience in the narrower sense, immediate experience"; * but this pre-cognitive level is either completely ignored, or inadequately analysed, according to the actual meaning of his description of the situation.

All that Stout says therefore with regard to knowledge † is perfectly true. Knowledge is always self-transcendent, and (in principle) to an infinite degree—a feature of the situation to which I shall recur later on. But this important truth is here totally irrelevant. For it holds of knowledge *once this has arisen*; it cannot explain therefore *how* knowledge arises in the first instance—which is the real crux of the present problem. It is no adequate solution to apply this principle of transcendence even to primary sense-knowledge and to hold "that in primary sense-knowledge more is immediately known than is immediately experienced".‡

For if "primary sense-knowledge" is here identical with "immediate experience" the distinction just referred to is obviously ignored; while if the distinction itself is maintained, then no account is offered of the manner in which the two modes are related and the way in which one develops from the other. It is true that Stout calls this principle an assumption; but, taken with the due literal meaning of

* *Mind*, vol. xxxi. pp. 390, 391. † *Ibid.*, p. 393.

‡ P. 394. The same difficulty arises in Kemp Smith's theory, discussed in the succeeding chapter.

" knowledge ", it is no more an assumption than the truth that the base angles of an isosceles triangle are equal ; the one follows from the essential nature of knowledge as the other from the nature of an isosceles triangle, although in both cases this " nature " has to be analytically explicated. But though this assertion is true of " primary sense-knowledge " it still leaves open the further question how this knowledge is related to sense-experience—sensing—which in itself is not knowledge, but is nevertheless the essential preliminary to all knowledge. " Primary " here is so far ambiguous, implying both a logical and a temporal priority—both an indispensable factor in every separate instance of knowledge and the original phase with which all experience begins. Our problem concerns temporal priority predominantly, although the logical priority, being the outcome of this as appearing subsequently to it, is also of great importance.

My contention here is confirmed even by Alexander's express contradiction of it in his own discussion of Stout's position. For he holds emphatically that " *all* experience is knowledge " ; but his immediate qualification of this assertion at once disproves its universality. " All experience," he continues, " claims to be *true* knowledge." * But knowledge, essentially, *is* true knowledge—is certainty, as Locke holds it to be.† *All* experience therefore can be knowledge only if it is, with no exceptions whatever, true knowledge—if its " claim " is substantiated by later criticism ; and not only does this rarely occur in actuality, but the process involved, as Alexander himself recognizes, is in itself much too complex to characterize the earliest phases of experience. For he continues : " If knowledge is identified with true knowledge we introduce a new element of value . . . truth is a *product* of art " ; and thus " the experience which is knowledge is *at a higher remove* than that called experience by acquaintance ".(1)

This further terminological point appears to me to be of

* *Mind*, vol. xxxii. p. 2. Italics mine.

† Similarly Plato held that knowledge, as such, must be infallible, as distinct from fallible " opinion ".

extreme importance; and both Stout and Alexander have inadequately expressed here the true character of knowledge, as such. It is, I would once again submit, incorrect to speak of "knowing" physical objects or things, such as tables or chairs; and we can use the term "object of knowledge" only in virtue of a metaphorical expansion of "object". We sense, or perceive, physical things, but we never "know" them; though we may know about them. Knowledge *i.e.* is always of facts, principles, truths; its content is expressible only in explicit judgments, which is impossible in the case of the direct content of sensing and perceiving; although we may say, but again only metaphorically, that "I perceive your meaning" in the sense that we understand it. Knowledge, in other words, is essentially of universals; "the world as known consists of universals exhibited in differences",* as is, of course, implied in Stout's principle of noetic synthesis.† Experience, however, cannot begin with universals, though it quickly attains them; it begins with particulars; and these are never known, but sensed. "Sensation has to do with nothing but singulars, *this* pain, *this* taste"; ‡ and the nature of perception, in this respect, is a difficult question; its content is intermediate between particular and universal,§ and is then best regarded as an imperfect form of the individual—as a particular attaining to universality, just as perception itself is implicit judgment. But however this may be, we can become conscious of universals—*i.e.* we can "know" —only by first becoming aware of particulars; which means that *all* experience cannot, speaking with due literalness, be knowledge, as Alexander maintains;(2) nor, on the other hand, can primary sense *knowledge* explain its own origin and development.

To discuss this problem further would necessitate a positive theory of knowledge as such which is, however, beyond the purpose of the present volume. I need add only that the elemental particulars of all experience must not be absolutely

* Bosanquet, *Logic*, vol. ii. p. 2. *Cf. ante*, p. 19.
† *Cf.* Alexander, *ante*, p. 92. ‡ Hegel, *Logic*, sect. 24.
§ Which must here not be confused with the general.

opposed to universals; much less must the content of awareness be regarded as a subjective sensory manifold in any Kantian sense. On the contrary, sensed contents are all (in principle) interrelated factors of one natural and objectively real continuum; only they can never, at the outset, be in any way *cognized* as such. If they could, experience would actually *begin* as knowledge (as Stout contends) whereas my own theory regards knowledge as gradually developing from non-cognitive sensation—how, of course, is a separate question which I may have another opportunity to consider. In other words, judgment is not fundamental in awareness in the sense of occurring from the very first moments of experience; it arises gradually, and its simplest forms appear at a markedly early stage as indispensable factors of all perception, from which it attains its own independent status in pure rationality.

It must be maintained then, against Stout in one direction as against Alexander in the other, that even "primary sense-knowledge" (if it is really and not merely metaphorically "knowledge") is always the result of a development—is "a product of art"; * and Stout's principle that "more is immediately known than is immediately experienced" leaves the nature of this development not only unexplained but unanalysed. For the problem is, if "the whole complex content of sense-experience and each of its parts are primarily apprehended as continued into a whole which transcends and includes them", how do we become conscious of (*a*) this wider whole itself and (*b*) its connection with—"continuance into"—sensed content? Obviously (*a*) and (*b*) must include constituents fundamentally different from sensed content, because inapprehensible by sense-awareness; for if this is not the case, there is no problem of any kind—we apprehend the wider whole by the simple prolongation of sensing; and sensed contents must then always (in principle) be physically real, as Alexander maintains; or they can never be known to be real at all—as Stout admits.† Of course if his assumption takes a form alto-

* On this see further below, p. 95.

† "If not themselves features . . ." (*Mind*, vol. xxxi. p. 389).

gether different—if he *assumes* that awareness of sensed contents is *always* accompanied and supplemented by a knowledge of the existence of unsensed though perceived physical reality—if " for each individual the material world has two parts, one his own sensed contents, the other physical existence "*—then obviously this begs the whole question at issue and further discussion is impossible.

3. This, indeed, seems to be Stout's final position. For his analysis of the way in which we " determine definitely and positively the *nature* of the external object " † leaves the preliminary inquiry how, in " knowing sense-apparitions ", we also know of the *existence* of this external object, entirely out of consideration. We can explain " the antithesis between sense-experience as dependent on the body, and as dependent on things external " ‡ simply enough if we take these external things *for granted* ; and we can equally well fall back on " causal relations and relations of magnitude " if we *assume* that water fills the bath whether we are there or not.§

And the assumption, after all, seems superfluous ; it is negatived by the basal principle of Stout's realism—the material nature of sensed contents. For these are neither Lockean " ideas " of material substance, nor Kantian " representations " of noumenal reality. Their changes and variations, their distinctions, relations and unity therefore must also be material ; otherwise we posit mental relations *etc.* between material entities. Finally, these distinctions *etc.* are *known* distinctions ; || and this, in the first place, establishes the fact that knowledge, as knowledge, is the result of a development from sense-awareness ; ¶ for it can hardly be held that material relations are known from the beginning of experience.** Secondly, sensed distinctions *etc.* are both sensed, and known †† But they are essentially material. What then forbids the further expansion of our realism so that *all* physical existence proper may equally be sensed (or sensible) and known ? Human

* P. 394. † P. 395 ; my italics. ‡ P. 396.
§ P. 397. || P. 394. ¶ *Cf. ante*, p. 94, n. *.
** *Cf. ante*, p. 92, on Alexander's position here.
†† P. 394.

knowledge has surmounted difficulties apparently insuperable; why imagine it eternally baffled by the simple discrepancies of sensed phenomena? If indeed some extreme contrasts subsisted between sensed material entities and physical existents such as *e.g.* that between matter and ether, or molar and molecular masses, or ordinary motion and atomic vibrations, such a limited realism might be our only alternative. But for Stout the contrary is the rule; he insists repeatedly on homogeneity, correspondence, continuity and an identical order of being.* Once more then, since the material distinctions between sensed material contents are themselves sensed, why should sense-awareness become suddenly incapable of apprehending further physical distinctions and existents which are absolutely homogeneous and continuous with these?

The final outcome of Stout's dualism between sensing and perception, exactly as in the case of Critical Realism, is a mere noumenalism; † this follows first from the nature of relations, secondly from the character of knowledge. Stout posits, as has been seen, continuous existence, homogeneity of nature, identical order of being, and unified wholeness, between sensed but unperceived material contents, and perceived but unsensed physical existents. But continuity, homogeneity, unity and identity are relations; and relations cannot be asserted, except dogmatically and illogically, between relata unless these (in principle) (3) can be present to one and the same mode of conscious process, whatever specific form this may assume.

The attributes therefore of physical reality (again in principle) must either all be sensed, or all be perceived, before they can logically be included under the one category "material" or "physical"; though this obviously does not prevent all or some of them being both sensed and perceived. If then sensed content (as for Stout) is material, the incommensurability of sensing and perception is in itself

* P. 389.

† I am glad to find this view of Critical Realism confirmed by Bosanquet: "it is futile to maintain that (the object of thought) is not a *Ding-an-sich*" (*The Meeting of Extremes*, p. 146). *Cf.* further *Monist*, vol. xxxii. p. 395.

sufficient to debar us from calling perceived physical existence " material " or " physical " in the same logical reference and with the same fundamental meaning; while if there is no such common significance there arises an obvious absolute dualism, and continuity and homogeneity at once disappear. The contrast, further, between the organic dependence and intermittent being of the one and the independent persistence of the other enormously intensifies the basal difficulty, which becomes still more formidable when considered in its connection with the nature of knowledge—a subject already dealt with earlier in the present chapter.

REFERENCES TO CHAPTER VIII

1. (P. 92). *Ibid.*, pp. 2, 4; my italics. It is true that in one passage Alexander *defines* knowledge as inclusive of all our experience of objects: " let knowing stand for all kinds of apprehension of objects, whether sensation, thought, memory or imagination " (*Space, Time, and Deity*, vol. ii. p. 82); *cf.* p. 81: " the mind knows "; but this suggestion appears to be made only for the immediate purpose of his argument at that particular stage, and plainly conflicts with the narrower, but technically more correct, description of knowledge as " at a higher remove ".

2. (P. 93). Contrast however Baillie, *Idealistic Construction of Experience*, p. 73: " to be conscious of somewhat is surely knowledge. The precise relation, which merely determines the special kind of knowledge, does not alter the fundamental fact of its being knowledge ". *Cf.* also p. 112.

3. (P. 96). As with molecules and other scientific imperceptibles, or imaginary mathematical entities. *Cf.* on the physical reality of hyperspaces, F. Tavani in *Proc. Arist. Soc.*, vol. xxii. p. 55: " hyperdimensional space is physically real ".

CHAPTER IX

PROFESSOR KEMP SMITH'S REALISTIC BASIS OF KNOWLEDGE

1. Since the first draft of this volume was prepared there has appeared Professor Kemp Smith's *Prolegomena to an Idealist Theory of Knowledge*; and as the author expresses his indebtedness to Stout's criticisms, the fittest place for its consideration would seem to fall here; further, there are marked resemblances in detail between the attitude of both thinkers to sensa. Kemp Smith's realism, as expounded in this work, is perhaps best summed up by saying that his general standpoint is intermediate between the "ultra-realist" theory of Alexander and the modified representationism of Broad. At the same time Kemp Smith definitely maintains "an entire rejection of the doctrine of representative perception" in all its forms; his position, further, is adopted as the basis for "an idealist theory of knowledge on realist lines".* My own remarks, however, will be restricted in the main to his realism, with only incidental references to his theory of knowledge as such.

Here then the issue turns once again on the nature of sensa and of perceived reality.† In the first place Kemp Smith regards the former as "private without being subjective", so that colour *e.g.* is "a genuinely objective entity". Still further, they "do not involve extensity", while "so far as experienced they are transitory"; this in itself simply expresses the obvious fact that "they are experienced for a time, and then cease to be experienced". But not only so; they are in themselves "*essentially* transitory"—they are "events", not physical objects nor

* *Op. cit.*, pp. ix, 13.

† But in accord with my earlier remarks (p. 18 *ante*), I shall in what follows employ "sensed content" in place of "sensa".

inherent and permanent qualities of such objects. " They are slabs of duration, (but) their duration need not coincide with our experiencing of them . . . they may precede and outlast it, or may cease to exist before we have ceased to contemplate them ".(1) Nonetheless, (as for Stout) they belong " rather to the physical than to the psychical sphere "—a point which need cause no difficulty when we recall that many unquestionably physical events are transitory. The existence of sensed content, however, is far more complexly conditioned by physiological and (it may be also) psychical factors than is that of purely physical events; and these more special conditions then result in this content being always " accessible only to some one observer ".*

What then is the relation between sensed contents, as thus characterized, and physical objects? It follows, almost obviously, that the former " reduce without remainder to secondary qualities ". The primary qualities, on the other hand, cannot be sensed content at all; and thus the physical things that possess these qualities become " public existences " that are really extended, although at the same time the perspective in which they appear must necessarily be uniquely determined by all the conditions for each separate observer and must therefore—like sensed content —be private.† Such content, again, although in itself unextended, has become in the course of evolution inseparably connected with real extension; ‡ and this connection has finally become so intimate and complete that it amounts to a fusion which simulates identity—an identity unquestioningly accepted by naïve experience, and only to be discriminated conceptually by theoretic analysis. Conversely, this may be expressed by saying that while " both space and colour are immediately apprehended (so that) colour is apprehensible only as spread out, and therefore as involving space ", still the actual truth is " that space is apprehended only *in terms of* sensa, not *through* them ". Similarly with regard to time: " we gain an articulated view of time and space by means of sensa, but time and space are not themselves sensory in character ".§

* Pp. 71, 76. † Pp. 12, 72. ‡ Pp. 79, 200 *sqq*. § Pp. 14, 71, 80.

Space and time therefore (to repeat) can never be sensed; and yet it is an equally essential principle of Kemp Smith's realism that they "are directly apprehended as constituent of the natural world". The mode of their apprehension then—as for Alexander—is not sense but intuition—"a distinction which I regard as quite fundamental . . . by intuition I mean the process through which we apprehend (sensed contents) in a spatial and temporal setting . . . the two processes, though fundamentally different and quite definitely distinguishable, never occur apart, (and) are likely to exercise influence on one another; and of their doing so there is a considerable amount of empirical evidence".* Somewhat more precisely "there are only four possible modes of existence which we can contemplate directly face to face: sizes, shapes, motions, and (sensed content) . . . the first three are intuitively apprehensible . . . (they) involve much more than sensing; they involve intuition . . . meaning thereby the face to face apprehension of time and space".† Connected with this "intuitive" apprehension is the formal character of space and time. "They are not contents, but only forms for the organization of contents . . . this is why there can be no awareness save on the occasion, as well as in terms of" sensed contents.‡

This use of "intuition", together with the formal nature of space and time, at once reminds us of Kant.§ I cannot help thinking that this is decidedly unfortunate. For the Kantian intuitions are all furnished by sensibility, while "pure intuition exists *a priori* in the mind, as a mere form of sensibility, and without any real object of the senses or any sensation".‖ Throughout the consideration of Kemp Smith's realism, therefore, it is necessary carefully to guard against every such Kantian interpretation of his position. For he regards intuition as in itself independent of sensing, and also as the immediate apprehension of objective physical

* Pp. 13, 76, 77.
† Pp. 132, 204. Motions plainly imply both time and change.
‡ P. 187.
§ "To these processes I have, following Kant, given the title intuition" (p. 132).
‖ *Transcendental Æsthetic*, Introduction.

reality; "space can be apprehended only because it is actually there, and in the process of intuition presents itself to us in its own person".* This precaution is all the more essential inasmuch as his account of the relation between sensing and intuiting resembles in certain aspects Kant's postulation of "the representation of space as a (prior) foundation". Alexander, again, has employed "intuition"; but my own impression is that while he regards the term as having important metaphysical implications, Kemp Smith restricts himself to its logical and epistemological meaning; his treatment of the subject, as a whole, seems to me to be more detailed than Alexander's. I have mentioned these points simply in order to present his own standpoint as clearly as possible. For if we also include Bergson, we may erelong find "intuition" rivalling "experience" as a source of confusion and obscurity.

2. Kemp Smith's position may then be summarized as follows. "Our conscious (perceptual) experience is a function of two distinct factors (sensing and intuiting), each of which must have its own specific set of conditions. . . . Through the constant factors (space and time) a public world is revealed; through the sensa, in terms of which alone this public world can be actually experienced, it is apprehended in a (unique) perspective, suited to the individual's practical needs".† Actually, however, this passage describes not only perception but all experience, since to time and space we must add the categories. My criticism, however, is restricted to the author's realist basis of his complete theory of knowledge.

I shall now endeavour to establish the following three conclusions.

a. The theory of intuition involves either an infinite regress or a vicious circle. There is no difference between these in principle, since in the first case we go backwards interminably, and in the second we go around interminably; in both alike therefore we fall victims to a false infinity, and no valid explanation of consciousness can then be attained.

* P. 159; *cf.* 227.
† P. 187; the bracketed words are my additions.

b. But if, for argument's sake, we admit that space and time are intuited, while all sensed content is so conditioned as to be essentially transitory, then we can never perceive the real physical world. Nor, since perception is the foundation of knowledge, can we know this world in any true sense of " know ". The ultimate result can thus be nothing more than a physiological subjectivism instead of the familiar psychological variety; in other words, realism becomes so exiguous as to be practically worthless.

c. There is therefore no difference, in principle, between the mode of perceiving time and space, and the mode of perceiving sensed content; the former, that is, are not originally intuited but sensed. It follows therefore that sensed content is not necessarily all transitory, though some of it is so; nor need it all be private or unextended.

a. So far as I have outlined Kemp Smith's theory hitherto time and space are both on the same footing; neither is sensed but both are intuited. In strict consonance with this all sensed content lacks extensity; it should follow, therefore, that it also lacks duration. But this is by no means the case. On the contrary, all sensed contents " have duration, and so far exhibit temporal continuity . . . (they) *are* slabs of duration . . . consciousness of duration must therefore be accepted as having been present *from the start.* . . . Time does, indeed, appear to be *more inextricably* bound up with (sensed contents) than is space; admittedly they have duration, whereas we are questioning whether any of them have extension ".* It is true that this is first advanced as an assumption which must be further justified; nevertheless it remains in direct conflict with the final conclusion " that what is strictly sensory in the continuum is not continuous, and that what is continuous in it is not sensory ".† A still more essential point however is that no parallel assumption is held to be necessary in the case of extensity. Either therefore there exists some fundamental difference between the relation of sensed content to time, and its relation to space, which is not explained by the difference between sensing and intuition, or the principle

* Pp. 70, 83, 86, 199. My italics. † P. 227.

that sensed contents " are slabs of duration " is altogether unfounded.

But when we accept this principle and consider Kemp Smith's further elucidation of his position here, the infinite regress to which I have alluded at once discloses itself. For we are now asked to " recognize as a fact quite fundamental that the continuing character of (sensed content) does not, by itself, suffice to explain consciousness of their continuity . . . in all cases consciousness has a field more comprehensive than any (sensed content) . . . consciousness of duration must therefore be accepted as having been present from the start ". Similarly, only still more clearly, with regard to space. " The space which we sensuously apprehend, be it large or small, is always apprehended as falling within a space larger than itself, and as being conditioned in its existence by this wider whole. . . . Spatial limits can be known only through a consciousness which *from the start* apprehends each of them in a wider unitary setting." * Additional quotations would merely further elucidate this standpoint ; and here it must be recalled that awareness of time and space, purely by themselves, is wholly impossible ; for they can be apprehended only " in terms of sensa . . . where there are no secondary qualities, there is never sense-experience in any form ".† The fallacious infinitely regressive explanation—the vicious circle—is patent. For not only must all sensed content be always transcended, but so must all apprehended times and spaces—" always, in all cases, from the start ". But under these conditions there can never occur any actual " start " to any specific conscious experience whatever. For the suppositious beginning of every infantile experience, even of all consciousness itself,‡ must have been conditioned by the consciousness of a wider and completer time and space than was then actually apprehended ; and this, again, by a still wider, so that, logically, the whole of space and

* Pp. 87, 81, 83, 84, 85.

† Pp. 80, 191. *Cf.* 194 ; " the mind is dependent throughout upon given sensa ".

‡ Or at least in animals having definite sense-organs. But Kemp Smith insists emphatically on the continuity of all experience.

time must be apprehended in order that any may be apprehended.

Such a theory is tenable only if time and space are Kantian forms present in the mind *a priori*, or if human and animal consciousness is the manifestation of some universal consciousness, somewhat as Green maintained; and in this respect there occurs a perplexing passage on pp. 187, 194: "time, space and the categories agree in being formal. They are not contents, but only forms for the organization of contents . . . the mind can, *out of its own resources*, bring into operation formal or categorial factors".* But on any genuinely realist principles this is impossible; and it becomes still more so when we realize that the consciousness of space and time, even in the manner just outlined, can never occur apart from the operation of meanings and categories, the most fundamental of which is "the category of whole and part, the basis of all (others)".† Any detailed consideration of these categories is here unnecessary, since I am not concerned with Kemp Smith's theory of knowledge as such. It is sufficient to note that "two categories are indispensable for any kind of intuition, whether of time or of space—totality and necessitation. . . . Intuition is impossible without categorial thinking; nothing can be intuited save by the aid of meanings conceptually entertained . . . the occurrence of sensing is likewise conditioned by categorial thinking . . . any actual consciousness involves sensing, categorial thinking, and intuiting".‡ Here the essential difficulty obviously arises from the universality of these principles. For Kemp Smith is not discussing the highest levels of reflective knowledge only; his analysis includes "any kind of intuition—any actual consciousness"; and further, it applies still more definitely to perception.(2) It must follow therefore that every infant, indeed every vertebrate, can perceive only by means of the most abstract and comprehensive of logical categories. For once more it must be recalled that intuition operates "always, in all cases, from the start"; but it cannot thus operate at all apart from categorial thinking. Nor again are we dealing

* My italics. † P. 163. ‡ Pp. 134, 158.

here with the gradual formation of concepts, since this process is definitely excluded as being necessarily subsequent to perception as thus conditioned. "If so much be not granted as apprehended from the start, there is no further way of explaining how any further knowledge can be acquired. To maintain that thought must in all cases be subsequent to intuition would therefore seem to be impossible . . . nothing can be intuited save by the aid of meanings conceptually entertained"; * and among these indispensable original conditions are the *concepts* of "totality" and "whole and part".† And thus the vicious circle of explanation becomes complete. Discursive thought and developed conception are subsequent to perception, which itself necessitates both intuition and categorial thinking—the employment therefore of the most advanced of all concepts; just as the perception of any space or time demands the prior apprehension of all space and time. It is surely impossible to accept this as a realistic explanation of *all* perception "from the start", even if we admit that the indispensable concepts are "employed without explicit formulation"; further, the specific example adduced in support of the theory (that of the burnt child and the fire)‡ obviously deals with a *second* experience, whereas the entire analysis is professedly concerned not with the second but with the first.

Allied to this employment of categories is the universal presence of meaning in the whole of experience, including therefore perception. "Intuition is the apprehension of what is contemplated, in terms of meaning—that which is apprehended being apprehended quite as much in and through these meanings as in and through what is directly 'seen' or 'touched.' This is, indeed, the essential difference between sensing and intuiting"; in other words, "not merely is the spatial context an *implied* wider context. While being so, it likewise with perfect continuity passes into . . . the perceived space-span . . . the intuitive apprehension of time and space involves the apprehension of

* Pp. 135, 158. *Cf.* 112 on "conceptual elaboration of space".
† P. 134. ‡ P. 136.

meanings, and as factors indispensable to the possibility of such meanings, certain categorial relations. . . . Time and space are surcharged with meaning".* Now if we were here considering the gradual development of the higher forms of knowledge alone (3) there would exist no essential difficulty; but we are dealing with all the earliest forms of personal experience. Meaning and implication, however, must always refer not simply outwards and *beyond* any given content, but ultimately also backwards and *before* that content. "You cannot establish a fact and point out its implication by one and the same process. They are distinct implications having different bases." † Once again therefore Kemp Smith's ascription of meaning to *all* primal apprehension results in either a vicious circle, or the postulation of a general standpoint typical of Kant or Green. Certainly he asserts that "only as metaphysically oriented is the human type of consciousness possible at all".‡ But his further reference to Stout clearly shows that meaning and implication "*emerge successively*", and cannot therefore be present from the very outset. It is then only from some such position as Stout's, or Bradley's treatment of "now" and "then", which are for him also not primary but emergent, that we can hold that "only by transcending the immediate can (the mind) apprehend the immediate"; so that it is wholly impossible "that consciousness *always* involves the thought of more than is perceived".§ This can be true only of developed perception and knowledge; whereas Kemp Smith insists on the activity, not merely of intuition, but also of categorial thinking, from the first beginning. To appeal to psychological heredity (p. 186) is simply to throw the entire problem backwards; it implies that either animals must employ implicit categories as we do, or they do not perceive reality as we do.

This phase of Kemp Smith's theory, indeed, rests on a confusion between two markedly different forms of transcendence—between the *ontological* transcendence which

* Pp. 156, 85, 132, 157.
† Bosanquet, *Implication and Linear Inference*, p. 12.
‡ P. 176. § Pp. 176, 182; my italics.

characterizes all real existence, and that *epistemological* transcendence which gradually arises within experience as its development brings it into an ever wider and closer contact with the universe. Both types of transcendence are equally real, and the second is the natural consequence of the first.

Every element within the universe, that is to say, is connected in some way or another with every other element, which plainly means that it is at every moment of its existence transcended by the whole; it is, in other words, limited or finite in the Hegelian sense; and this constitutes ontological transcendence. Inseparably allied to this is the interconnection of all the factors of experience; whether as sensed content, percept, concept or knowledge, each alike is obviously transcended by experience regarded as a whole. But on the other hand, the whole of no finite experience can ever be the whole of reality; and yet Kemp Smith has confused these with one another by postulating the influence of ontological transcendence within experience from its very beginning, whereas what actually operates there is epistemological transcendence, the natural result of its slowly growing complexity. From a somewhat different standpoint, there is here a failure to distinguish between knowledge, as such, and that experience which must precede knowledge. Kemp Smith's whole theory is really an account of the *development* of knowledge, and so far as this is the case I have not criticized it; its failure lies in its application to the whole of experience "from the start", including all levels of perception.* This is especially obvious in the consideration of "mature and explicit consciousness"; here it is undeniable that "the thought of something not sensuously given conditions the sensuous experiences which are given". But we cannot therefore conclude, as Kemp Smith immediately proceeds to do, that this occurs "also in implicit consciousness", if "implicit consciousness" denotes all precognitive and perceptive experience.† For

* *Cf.* p. 158: "complete consciousness, *i.e. any actual* consciousness, involves . . . sensing, categorial thinking and intuiting". My italics. *Cf.* pp. 93 *sqq. ante.*

† P. 139. I think neither Bradley nor Stout would accept this application of the argument.

knowledge itself cannot begin with the first dawn of experience, either individual or racial; it is a development springing from pre-cognitive consciousness, and conditioned therefore by sensing and primary perception; whence it follows that no theory of knowledge can also serve as the theory of perception of the physical world.*

3. *b.* I shall now consider the consequences of the distinction between space and time as intuited but never sensory, and all sensed content as being "essentially transitory". It follows from this that the only permanent qualities of physical reality that can be perceived, as apart from ideally constructed, are "sizes, shapes and motions . . . through intuitive sense-experience we can apprehend, in addition to (sensed content) only shape, size and motion".† Here again the difficulties arise from the absoluteness of this distinction, together with the universality of the principle.

For, omitting here categorial thinking as irrelevant to the immediate issue, the sole physical entities that can be intuited are space, time, size, shape and motion; all else, without any exception, is sensed and therefore transitory—private event, not public object. It at once follows therefore, from the very conditions of the further development of experience into the higher levels of perception and knowledge, that we can never perceive nor know anything more of physical reality, as such, than motion, shape and size. For the entire course and the whole content of this further development spring from intuition, sensing and categorial thinking. Discursive thought, ideal construction and conception can find no other basis and no other material. We can therefore neither perceive, nor conceive, nor imagine, any permanently existing physical entities nor attributes whatever except sizes, shapes and motions additional to those revealed in primitive consciousness. For all other perceived objects and properties can be nothing other than some reproduction of sensed content, and must therefore be, like this content, "essentially transitory", and —still further—determined in their whole character by the human brain and mind; and if these last can be sensed,

* *Cf.* 93 *ante* on knowing and perceiving. † Pp. 133, 162.

they too are transitory ; while if they cannot be sensed, then they fall within the scope of the present argument. If then any real permanent physical entities exist, other than shapes, sizes and motions, they must be purely noumenal.* For, as Kemp Smith himself points out, they cannot be sensuously experienced, but " only reached through ideal construction " (p. 166). Ideal construction, however, can never transcend the inherent impermanence and the narrow specific conditions that characterize all its sensuous raw material. All its own products are thus reduced to the level of Kantian phenomena, real (in a sense) for human experience, but not beyond this conditioned experience ; so that if there are any real physical existents, either they are the scanty few that are directly intuited, or they are wholly noumenal.

This is, indeed, formally recognized by Kemp Smith himself. " The outer world has become deprived of all but a very small portion of its rich content, and what remains is altered and simplified in terms of (sensed contents). . . . When these allowances are made, little may seem to be left that is genuinely public. Nothing that we experience exists independently, precisely in the form in which we experience it." † But the essential difficulty is that this deprivation can never be remedied by conception and thought. The utmost these can do is to rival the post-war methods of European finance—relieve our perceptual poverty by the continuous issue of mental currency all of which is as valueless as its transitory predecessors. " So far," continues Kemp Smith, " we can agree with the subjectivists " ; and thus the exiguity of the resultant realism becomes patent—all the more so when compared with the standpoints *e.g.* of Bosanquet and Whitehead.

But a still more serious consequence follows. All causative action becomes noumenal also, including its application to the existence of sensed contents themselves. For these are presented as the final results of a long and complex series of processes ; they " are events, conditioned by

* Always in the bad early Kantian sense of this term. *Cf.* p. 61 *ante.*
† P. 227. *Cf.* p. 222 on " a real and independent material world ".

physical, physiological and possibly also psychical factors " ; the real physical factors then being time and space. " I am not simply asserting that time and space condition our *consciousness* of (sensed contents) . . . they condition (their) very occurrence. Only in a time-space world which allows of the required antecedent happenings can (sensed contents) obtain foothold in existence ".* But we cannot conceive of time and space, purely as such, being causal physical agencies, unless we identify space with the ether as Einstein has recently done—a standpoint which, while perfectly legitimate, raises obvious difficulties of its own and is not adopted by Kemp Smith. Sensed content therefore can ultimately be conditioned, or caused, by only the physical existents in the " time-space world " ; but we can never perceive—and therefore never know—these physical causes. All we can do is to intuite sizes, shapes and motions, none of which is efficiently causal, even if it can be formally so on the principle of invariable antecedence.† Every other assignable cause must therefore be either some conceptual modification of these, and therefore similarly formal, or some modification of sensed contents which themselves, however, are all effects, and therefore not their own physical causes.(4) Neither intuited nor sensed existents, then, nor the categories,‡ can be actual physical causes. But nothing whatever else remains, for these between them exhaust the foundations of all knowledge. Either therefore efficient physical causes are non-existent, or they are noumenal.

4. *c.* Thus there still remains the alternative standpoint adopted by Alexander, and advocated in this volume, that sensed contents themselves are physical objects and physical properties, and that time and space are originally not intuited but sensed.§ Kemp Smith has nowhere given the consideration that it merits to the principle that all appearance is partial reality, as a solution of the problems of perspective and " private " perceptual experience.‖ For

* Pp. 71, 198.
† " Time and space are relational forms of existence " (p. 156).
‡ " Formal and problematic " (p. 144).
§ *Cf. ante*, p. 25.
‖ *Cf. ante*, p. 51.

him therefore perspective becomes " as unique as are instinctive and other needs ", while " the distinction between appearance and reality " is equated to that between " phenomena and things in themselves ".* With regard to spatial perspective, the resultant dilemma is obvious. For so far as it is spatial, it cannot (on Kemp Smith's own principles) be sensed. As spatial therefore it must be intuited; but perspective, from its very character and conditions, must merge at some point into space proper, which also is intuited; either then space, like all perspective, must be " as unique as instinctive needs ", and therefore not real; or perspective is itself real and not unique; and the same argument applies to temporal perspective. The only possible alternatives are (i) perspective is neither intuited nor sensed; (ii) real time and space are noumenal; both being rejected by Kemp Smith.(5)

In the next place, his distinction between sensing and sensed content † is not consistently applied. The process or activity of sensing is fundamentally different from all such content; yet (as we have just seen) both the occurrence of this content and the sensing activity itself are alike dependent on nervous processes.‡ On the other hand, the intuition only, not the occurrence, of " sizes, shapes and motions " is thus dependent. I have already discussed the resultant causative noumenalism; but there is also the high antecedent improbability that the brain can perform two functions so absolutely different as are sensing and the production of sensed content, especially when we consider the definiteness and vividness of this. If, on the contrary, we accept this possibility, nothing prevents our extending it to intuition and to space and time except the prior assumption that the latter are objectively real. It seems to me, however, that it is superfluous to consider this suggestion even in the case of images and ideas,§ and

* Pp. 187, 235; but the note to p. 235 leaves this point somewhat confused.

† P. 44. " Failure to distinguish between Sensing and Sensa."

‡ Sensed contents " occur as terminating members in certain lengthy series of events which begin by being physical and become physiological " (p. 73).

§ *Cf.* below, p. 183.

much more so therefore with regard to sensed content; and then the principle that appearance is partial reality enables us, with Alexander, to regard sensed content as itself possessing purely physical characteristics.(6) For on Kemp Smith's own theory, the processes of intuition and sensing are inseparably supplementary, otherwise intuition can have no objective content. Since then physical objects originally caused * intuiting they must simultaneously have caused sensing.† But this again would be impossible unless it could be directed upon some independently existing content; this however could not be "sizes, shapes and motions", for these are intuited, not sensed. "Space cannot be apprehended by a process of sensing . . . where there are no secondary qualities, there is never sense-experience in any form".‡ Nothing remains therefore but sensed content, not however as the "terminal members in very lengthy series" (p. 178) but as real properties of the initial causal physical objects. "The twofold function of the brain"(7) thus becomes a wholly superfluous suggestion; nor is its character, in any case, at all analogous to the functional dualism of the tongue discussed on p. 190. Further, since the *distinction* between sensing and sensed content is strictly parallel to that between intuiting and space-time, the argument of p. 188 really proves not merely that "no colours will emerge", but that neither space nor time will emerge either! Time, space and all sensed content, in other words, are on the same footing; so far as perception is concerned they stand and fall together.

Nor is it necessary to appeal, on psychological grounds, to any "intuitional factors" to explain the staircase diagram and similar phenomena; § for these are merely extreme instances of cases quite explicable in terms of the part played in perception by images and ideas.(8)

In conclusion, Dr. Henry Head's recent discoveries are

* Or conditioned or aroused.

† "The functions of the brain are, indeed, so far as we can discover, always exercised simultaneously . . . both (sensing and intuiting) are required to make possible sense-experience" (pp. 190, 212.)

‡ Pp. 179, 191.

§ Pp. 78, 209.

very far from supporting Kemp Smith's conclusions. He has himself pointed out the ambiguity of "sensation". But it is perfectly obvious that Dr. Head's results all bear upon "appreciation, recognition, discrimination, localization"; * that is upon forms of awareness, not upon apprehended content of any kind whatever. It is only the processes of apprehension † that are affected by nervous lesions; so far therefore as Head's position is relevant the objective content may exist quite independently of these processes. Head's own standpoint, indeed, is perilously subjectivist; for he accepts a "power of projection, projected aspects of sensation, a complex of projected responses, projection in space, and projected elements in sensation",‡ in a manner totally incompatible with Kemp Smith's own realism, and which finally results in the latter's acceptance of this familiar subjectivist theory of "projection" under the guise of "locating the secondary qualities in physical objects" in such a way that "we are, almost certainly, subject to an illusion" (p. 222). On the other hand, if we once accept "projection" to the same extent as Head, then nothing can prevent our extending it to include time and space, so that even these become "projected" or "located" into a really timeless and non-spatial world. Certainly no mere special theory of "a capacity for intuition" can disprove this possibility. I conclude therefore that many essential features in Kemp Smith's theory are illogical; while even if they were not so, the resultant realism can be little more than noumenal.

REFERENCES TO CHAPTER IX

1. (P. 99). Pages 12, 13, 37, 70. *Cf.* also pp. 71, 73. Sensed contents "cannot be known to be qualities inherent in the physical objects" (p. 178). "Contemplate" is used in its ordinary meaning, not in Alexander's restricted sense.

2. (P. 104). Page 112: "What has to be accounted for is our

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* Pp. 214–216. On "sensation" *cf.* p. 44.

† "*Conscious awareness,* capacity for apprehending temporal definition" (pp. 218–220).

‡ Pp. 216–220.

perception that the various discriminable extensities do actually form parts of the total field of the moment. We do not merely *think* each of these partial extents as belonging to a single space; we sensuously *perceive* them as a continuous whole."

3. (P. 106). It must be noted that this was the original aim of the associationist theory of "revival of past experiences", repudiated by Kemp Smith (p. 182). The failure of its later attempts to explain the consciousness of time and space is obvious, and affords little support therefore to his position.

4. (P. 110). Sensed contents "are complexly conditioned by antecedent physical and physiological processes, and as thus occurring as terminal members in very lengthy series cannot be known to be qualities inherent in the physical objects in which the series originate" (p. 178).

5. (P. 111). His position would become clearer if the word "otherwise" could be more definitely explained in the phrase "otherwise apprehended" on p. 141. The possibility that it means "more fully" seems to be overlooked; but it involves "degrees of reality", not as a "metaphysical" principle (p. 142), but as epistemological.

6. (P. 112). A point of minor importance arises here. Referring to Alexander, Kemp Smith assumes "that images are identical in character with sense-perceptions" (p. 195). Alexander, however, regards images as having "physical existence independent of the mind" (*Space, Time, and Deity*, vol. i. p. 24).

7. (P. 112). P. 187: "as conditioning awareness, and as conditioning the occurrence of" sensed content. Kemp Smith's whole treatment implies that "conditioning" has at least causal aspects.

8. (P. 112). *Cf.* those cited by H. H. Price, *Mind*, vol. xxxiii. p. 29. In the staircase diagram and its analogous instances the actually sensed elements have been deliberately reduced to their minimum. Thus they become capable of being associated with *alternative* groups of image content; sometimes one of these predominates, sometimes the other; and the resultant percept changes accordingly. But if the sensed factors are still further reduced, this association ceases entirely owing to the insufficiency of the sensible basis. Other psychological points of minor importance may be noted here (p. 211 *sqq.*). Is not "the connection between thermal sense" (as purely thermal) "and extension" acquired, just as it is in the case of "auditory sensa"? If so, it is illogical to employ it to explain visible extension. Again, is not the "scratching" phenomenon of p. 218 explicable in terms of the nervous arcs alone?

CHAPTER X

MR. BERTRAND RUSSELL'S DUALISTIC REALISM

1. We have seen that for Stout "the contents of immediate sense-experience fall on the side of matter and not of mind". Mr. Bertrand Russell's philosophic standpoint, while also realistic,* differs from Stout's in the fundamentally important respect that these same contents (which he calls sensations) are both mental and material at one and the same time—are physical and psychical equally. His use of the term "sensations" further distinguishes his position from that of Alexander and the New Realists, who employ "ideas". Thus "the patch of colour may be both physical and psychical", "physical" and "psychical" being aspects of existents which are themselves "neutral entities", from which "our world is to be constructed";(1) a standpoint (as Russell indicates) largely identical with that of James in his latest writings and of more recent American realism. For in the first place, "the stuff of which the world of our experience is composed is something more primitive than either" mind or matter; and further, this "stuff, so far as we have experience of it, consists of innumerable transient particulars such as occur in seeing, hearing, *etc.*"(2)—consists *i.e.* in part at least of sensations. Obviously this "dual aspect" interpretation of the content of sense-experience diverges fundamentally both from Stout's realism and from that which I have thus far maintained. I regard sensed contents as being physical, but not in any way psychical, although at the same time they become objects of consciousness or of knowledge; † so that the difference between

* "I remain a realist as regards sensation, but not as regards memory or thought" (*Analysis of Mind*, p. 20).

† *Cf.* however my *caveat*, p. 19 *ante*.

physical and psychical is here one of ultimate ontological status, while for Russell it is a difference merely of aspect.

But while, in general, all distinctions of aspect are of the highest value, they can be drawn only within a sphere which is characterized throughout its entire extent by some definite nature, so that the distinctions themselves rest upon and imply some positive common basis. For " every level of reflective observation presupposes a previous level on which it improves. All that is in consciousness seems to present both difference and identity ".* Apart from this there could arise no " aspects " at all, since there would exist no standard of reference and interconnection. On the other hand, merely to describe this basis as " neutral " is, for philosophy, not an explanation, but simply an evasion, of a fundamental problem ; for it is to decline to apply any positive characteristics whatever to ultimate elements of experience, and to rest content with a purely *negative* neutrality. Even neutrality, however, possesses a perfectly definite nature of its own The status of neutrals during war *e.g.* is as definite as that of the belligerents ; and while every science, because it purposely limits itself to some prescribed sphere within the whole of reality, must begin with much which is for that science " neutral ", still it is impossible for philosophy to do this, simply because it is not science ; for philosophy must take account of the whole of experience and cannot therefore regard any of its ultimate factors as finally " neutral ".

But even if this duality be accepted, still the treatment of the physical aspect of sensations, as further interpreted by Russell, is thoroughly inconsistent. It is obvious, to begin with, that his general principle necessitates that the physical world must include all sensations without exception, unless we exclude those which underlie hallucination and delusion ; for otherwise some sensations would possess psychical attributes only ; and this proves in fact to be Russell's original position.(3) So far then there is no logical difficulty ; granting the premisses, this conclusion is valid. But when we turn to more strictly scientific

* Bosanquet, *Logic*, vol. i. p. 26.

considerations we encounter serious perplexities; for Russell goes on to assert that " physics treats as a unit the whole system of appearances of a piece of matter ".* But this is precisely what physics does not do. Whatever may be the ultimate ontological status of the physicist's " object ", there is no doubt that his scientific object is, to begin with, the object of naïve realism, however much this may become expanded by physical theory; this physical object, then, far from being " the whole system of appearances ", is a most carefully selected and precisely determined sub-group of the " whole system "; it is the object as it is, as distinct from what it appears to be. " A material physical object," observes Whitehead, " is an ordinary bit of matter, Cleopatra's Needle "; and the same is true, in principle, of scientific objects equally; " the definiteness and permanence of the Needle is nothing to the possible permanent definiteness of a molecule as conceived by science ", or of an electron; " science seeks objects with the most permanent definite simplicity of character ";(4) the physical object or " piece of matter " therefore is the exact reverse of Russell's " whole system of appearances "; it is a *deliberate* selection of these in the same way that the plain man's object is an *unreflective* selection from the entire series of appearances; † from this standpoint it must be distinguished from the surrounding gravitational or electromagnetic field.‡ But these considerations alone are insufficient to invalidate Russell's philosophic theory of matter; it would still be quite legitimate to *define* a piece of matter as he has done—as " the whole system of appearances ". But, as he proceeds, he himself completely abandons his own definition and adopts what is—once more—virtually the standpoint of naïve—and also of direct—realism as I have already presented it. But this fundamental qualification of the situation is introduced without the slightest explanation or justification, so that we can only conclude that its profound significance has escaped Russell's notice. For in the course of only a few

* *Ibid.*, p. 104.
† *Ante*, p. 55.
‡ *Cf. Mind*, vol. xxxi. p. 478.

pages the appearances or transient particulars which specifically concern physics prove to be, not in any sense the "whole system", but rather "the particulars which are *sufficiently near* to the object . . . *this limiting set* which the object would present if the laws of perspective alone were operative and the medium exercised no distorting effect". * This final definition obviously expresses in definite and explicit form both my own Direct Realistic principle and the instinctive attitude of the plain man; for alike by him and by Russell the greatest number of our actually experienced "sensations" is wholly excluded from the physical object, only those "sufficiently near" to this being now retained. But while the realist may quite logically select his "object" in this way, Russell has debarred himself from doing so and his "object" here is introduced altogether illogically. For "there is no single existent which is the source of all these aspects"; † what then is the "object" which is here posited as that to which the selected particulars must be "sufficiently near"? and what is the criterion of sufficient proximity? The "object" can be nothing other than the realist's "object" surreptitiously introduced to serve as the required criterion to which the particulars, themselves *ex hypothesi* transient, may be referred; while the "sensations" thus excluded must—again obviously—lose that physical aspect which is essential to Russell's realism and so fall altogether within the psychical sphere; and in his succeeding chapter Russell altogether ignores this modification of his original standpoint and reverts to his earlier definition, so that on p. 134 *e.g.* a star consists "of all those appearances which it presents *in vacuo*".

2. For argument's sake, however, these divergences may be ignored. But there still remains the problem of the relation between these two aspects of sensations—psychical and physical. Granting, *i.e.* that these aspects arise *pari passu* within experience, what is the basis of their distinction? This is Russell's fundamental problem—"the relation between the crude data of sense and the space,

* *Op. cit.*, pp. 106, 107. My italics. † *Ibid.*, p. 98.

time, and matter of mathematical physics . . . some way of bridging the gulf between the world of physics and the world of sense ". * His method here, however, seems extremely ambiguous ; for while " the whole conception of the world of physics (is) a *construction* rather than an *inference* . . . space may turn out to be valid as a logical construction ",† at the same time " the relation (of perception) to the object is inferential " ; ‡ surely then it is inferential equally to the " world of physics ". Inference, indeed, seems to be more fundamental than construction, since it is one of the only two methods (the other being *a priori*) whereby " anything can be known by me outside " my own experience.§ On the other hand, Russell's later remarks on Logic seem to me to contradict his treatment of inference here.‖

But whatever may be the logical character of our apprehension of the material world, and whatever may be the nature of the sensations which enter into that apprehension, it is in itself, psychologically, perception ; our datum here, as Russell points out, " is primarily a perception ".¶ For realism therefore our problem now becomes—What is the character of the perceived material world ? And what is the nature of sense-perception ? Russell, it must be remembered, has avowed himself a realist ; but it appears to me that his realism is, at bottom, a mere revival of Hume's ontology.

" The ultimate constituents of matter " we have seen to be " sensations " ; but not sensations alone ; there are " other things similar to sensations as regards extent and *duration* . . . *transient* particulars such as occur in seeing ".** But except insofar as sensations are endowed with a physical character, this is Hume's standpoint ; nothing whatever is permanent. Further, all sensations are purely private, even though they very closely resemble

* *Our Knowledge of the External World*, pp. v, 101.
† *Ibid.*, pp. vi, 113. ‡ *Analysis of Mind*, p. 112.
§ *Ibid.*, p. 132.
‖ *Mind*, vol. xxxi. p. 481. " A logical principle never asserts that this can be inferred from that."
¶ *Ibid.*, p. 299. ** *Ibid.*, pp. 121, 143 ; my italics.

each other; and whatever may be the intrinsic nature of the other "particulars similar to sensations", they become, whenever we perceive, converted into sensations.(5) The unperceived physical world itself therefore is neither directly sensible nor perceptible; its physical factors are somehow *transformed* into sensations which, while physical, are also psychical; whence it follows that when these transient sensations themselves cease to exist, the originally physical factors vanish into nothingness. Here again Russell's realism is in no sense new; it merely revives, but with additional difficulties peculiar to itself, the crude transformist theories of perception prevalent during last century.

This view is confirmed by Russell's whole highly confused treatment of perception. The physical particulars "travel outward from the thing"; * but this implies again that the "thing" must be a "limiting" group of particulars, not the whole of them, as expressly defined at the end of Lecture V.; † and finally we have the "complicated process ending in a sensation . . . a brain receives an impression". Here we arrive at perception proper; but what is its character? Perception, as such, proves to be this brain impression itself and nothing further: "an impression due to (eye and optic nerve) is called a perception. . . . If it happens to be in a brain, it may be called a perception".‡ Since Russell is writing with that scientific literalness which we may expect from him, and not indulging in the amateur epistemology of many earlier writers, perception, thus characterized, undoubtedly "is interesting to psychology on its own account"; but hardly in the sense in which the author himself intends.

Let us however consider the process here described on its merits. Perception declares that the Russellian sensation—the patch of colour—is situated in the external world—is "an object external to the brain". § Further, perception is part of "our own personal sensible acquaint-

* *Ibid.*, p. 126. † *Ante*, p. 118.

‡ *Ibid.*, pp. 104, 136.

§ "Everything is sensation that comes to us through the senses . . . the sensation *is* that patch of colour" (*Ibid.*, pp. 136, 139, 142).

ance", and is therefore "for us the most certain; the evidence of the senses is proverbially the least open to question . . . the immediate facts perceived are completely self-evident".* The "sensation" then is unquestionably situated where the physical object is situated—in the position, that is, from which the non-sensational physical particulars travel outwards towards the brain. But the only place where sensations, theoretically, can exist is in the brain, not outside it; so that the "completely self-evident facts perceived" are in direct contradiction with Russell's entire theory. Nor can this confusion be avoided by any two-spaces theory such as that previously advanced; † for this simply means that all the difficulties attending transformation and projection arise over again with regard to space itself.

Finally, perception becomes ultimately atomic; "the remainder, which is a mnemic phenomenon, will have to be added to the sensation to make up the perception". ‡ But even if this "addition" could be accepted as an accurate description of what really occurs, still this no more explains perception and knowledge than did Hume's analogous combinations of impressions and ideas. This inadequacy becomes plainly apparent in Russell's later discussion of the problem. The particulars in the brain—*i.e.* those which have been turned into sensations—"have peculiar effects which are called being known or being experienced . . . these mnemic effects give rise to what is called knowledge of the thing".§ But this, obviously, explains nothing whatever as to the nature of either knowledge or perception; it merely states the problem which demands investigation. When with this we find allied negative criticism of consciousness, causation, and the self, we see that Russell's realism is little more than a reversion to the ontology of Hume; in that case, can it fairly be termed realism at all? For all that it offers us, as Russell himself admits, is "the physical world, as known, infected through and through with subjectivity".‖

* *Our Knowledge of the External World* (George Allen & Unwin, Ltd.), pp. 67, 68.

† *Ibid.*, p. 89.

‡ *Analysis of Mind*, p. 132.

§ *Mind*, vol. xxxi. pp. 482, 483.

‖ *Analysis of Mind*, p. 230.

But if we accept the more scientifically accurate account of the physical object as the " limiting set " of particulars, we have a standpoint which is in principle, as distinct from the mode of expression, identical with that of the philosophic realism which I have endeavoured to elucidate. The object thus becomes a small sub-group of the totality of " appearances ", demarcated on the basis of some principle which is, however, nowhere indicated by Russell himself ; and within this limited group fall all those particulars which are " sufficiently near " to the object. Thus we obtain an explicit confirmation of the realist's distinction between reality and its appearances, and of the criterion which he maintains before his mind as the standard to which all the varying content of perception is automatically and unreflectively referred.

I think the source of the subjectivity which Russell imputes to the known physical world lies in his " main purpose—to fit our perceptions into a physical context, and to show how they might, with sufficient knowledge, become part of physics ".* It is obvious that realism must from its very nature maintain the closest possible connection between its theory of perception and its theory of physical reality. But this need not imply that only the most abstract concepts of physics are to be selected and regarded as descriptive of the sole existent physical reals. This seems to have been Russell's method both with regard to material objects and to causal processes ; and with this high degree of abstraction there goes—inevitably—that almost universal subjectivity to which he confesses. But we have seen that Whitehead on the one hand, and the group of physicists represented by Soddy on the other, are prepared to accept the material things of ordinary experience as being equally real with atoms, electrons and the electro-magnetic field.† It is true that until very recently physicists, unconsciously influenced by the prevailing philosophic atmosphere of last century, were either subjectivists or phenomenalists. But that is no reason

* *Mind*, vol. xxxi. p. 478.

† *Cf. ante*, p. 27, on scientific experiment and perception.

why philosophy should uncritically accept their abstract theories, and then endeavour to fit its account of perception and of knowledge into such narrow bounds. Rather must it seek to evaluate these very theories themselves and inquire what contribution they afford to our view of the real world as a whole.

REFERENCES TO CHAPTER X

1. (P. 115). "The sensation *is* that patch of colour . . . the patch of colour is physical. But it does not follow that the patch of colour is not also psychical, unless we assume that the physical and psychical cannot overlap, which I no longer consider a valid assumption" (*Ibid.*, pp. 142, 143, 36; *cf.* further p. 297); also: "New Realism asserts that when things are known, they are ideas of the mind" (Perry, *Present Philosophical Tendencies*, p. 308). "For us ideas are reality. Insofar as that reality enters into relation with the mind, it is ideas" (*Space, Time, and Deity*, vol. i. p. 16).

2. (P. 115). *Ibid.*, pp. 10, 143. *Cf.* p. 121: "the ultimate constituents of matter are sensations, and other things similar to sensations as regards extent and duration".

3. (P. 116). "A piece of matter is not a single existing thing, but a system of existing things . . . the whole set of sensations actually *being* the table . . . the table is the set of all those (transient) particulars . . . aspects of the table from different points of view" (*Analysis*, pp. 97, 98).

4. (P. 117). *The Concept of Nature*, pp. 169–172. *Cf.* the entire passage, in which Whitehead is expressing the scientific, not the philosophic, standpoint. The standpoint of the physicists, referred to *ante*, p. 60, seems relevant here.

5. (P. 120). "The ultimate constituents of the world are not solid persistent objects. . . . No sensation is ever completely public. Two people looking at the same table do not get the same sensations; they get only correlated sensations. . . . Part of the material world (comes) into the sort of contact with a living body that is required to *turn it into a sensation*" (*Ibid.*, pp. 124, 119, 144; *cf.* also p. 99). My italics.

CHAPTER XI

THE INADEQUACY OF CRITICAL REALISM

1. It is somewhat difficult to present the Critical Realist theory of perception at once briefly and precisely, for its joint authors naturally vary to a considerable degree in their treatment of the subject. I think however that we may accept a recent statement by Professor Strong as expressing their common central standpoint, while at the same time it exhibits those features which, in the end, reduce this type of realism to mere noumenalism.(1)

Critical Realism, further, is based upon naïve realism as its starting-point ; it " is a criticism of naïve realism " ; * and it presents, as a whole, extremely interesting historical connections. For the ancient Stoic philosophy regarded " phantasies "—the Greek term corresponding to sensa or sense-data—as generating an irresistible and therefore infallible belief not only in their own existence but also in that of their external objective causes. We find the same combination of subjective sensations with both an inherent significance and an instinctive belief in objectivity in the system of Thomas Reid. For just as Strong holds that " this belief is not a formulated one "—although I suppose it is always capable of formulation after due reflection—so Reid regards it as " not a deduction of reason, but a natural principle . . . part of our constitution ".† On the other hand Reid differs from the Critical Realists in the ambiguity of his view as to the relation between subjective sensations and objective qualities. Existent

* *Critical Realism*, p. 189 ; *cf.* p. 196.

† *Enquiry into the Human Mind*, p. 130. *Cf.* Broad's treatment in *Scientific Thought*, p. 175 below.

objects, for Strong, have " the characters which the appearance shows us " ; as with the primary qualities of Locke so here the properties of the object exactly resemble the attributes of the appearance ; only when the fatal defect of Locke's theory—the impossibility of our ever actually perceiving this resemblance—threatens equally to vitiate the critical position, the way of escape is always open through the instinctiveness, or the purely pragmatic character, of our belief in this essential likeness ; for while it is always possible, to say the least, to advance arguments against pragmatism, they are completely helpless when opposed to instinct, simply because instinct itself has little connection with argument. Reid, however, seems to regard some objective properties at least as altogether different from their sensational signs ; and it is rather curious that visible things, in his opinion, resemble our sensations of them so far as their magnitude and spatial form are concerned,* thus constituting an interesting contrast with the more general modern view that tangible qualities provide the most reliable indication of the real nature of material things. For, as Broad has pointed out, there is a large measure of unconscious agreement between science and common sense " that there exist real counterparts to the figures which all people agree in perceiving by touch ".†

The " belief that an object exists ", in short, can never guarantee anything beyond itself ; it affords therefore evidence neither for extra-mental existents nor for their possession of attributes similar to those of sensational appearances ; and the connection with naïve realism consists only in first of all transforming the plain man's certainty that he directly perceives material things into a " belief ", then importing into the situation a subjectivist theory of sensations, and finally accepting a modern *als ob* as the final warrant for physical existents. It thus becomes altogether impossible to assert that sensations or appearances " give knowledge ", or that the object is " directly

* *Enquiry into the Human Mind*, p. 142.
† *Perception, Physics and Reality*, p. 275.

known", in any literal sense of the term "knowledge", which is here employed with that looseness which has unfortunately invaded recent discussion.* For apart from their postulated similarity, the sensation or appearance and the physical object are almost absolutely disparate. "The physical thing and the psychic state . . . are unquestionably two and mutually independent. . . . The knower is confined to the datum, and can never literally inspect the existent. . . . We have no power of penetrating to the object itself and intuiting it immediately".† On the other hand, we can "immediately intuit" the sensation. "You can turn your attention to the mere sensation of light or heat . . . you can consider them in themselves"; ‡ but if this immediate intuition is properly to be called knowledge, then it is plain that our consciousness of material existents, however it arises, is knowledge of a totally different order; and we are then including both immediate intuition and instinctive belief in the same logical category. But if we retain the generally accepted distinction between knowledge and belief, then there at once arises the objection made long ago by Sergeant to Locke--"the thing resembled must be known, not only besides the idea, but by other means than by it . . . by the thing itself existing in the understanding".§ For "there can be no sense in talking of signs unless we start with some knowledge of what these are to be the signs. The significate is logically antecedent to the sign".‖ Critical Realism, however, posits an ontological dualism between sign and significate, while it further admits that the latter remains always beyond our immediate intuition; ¶ and this, in essence, is noumenalism. For as I have already argued with reference to Stout's position, noumenalism can be avoided only by identifying perceived content, onto-

* *Cf. ante*, p. 19.
† *Critical Realism*, pp. 240, 203, 225.
‡ *Mind, loc. cit.*, p. 317.
§ Sorley, *History of English Philosophy*, p. 128.
‖ Boyce Gibson, *Philosophical Introduction to Ethics*, p. 117. *Cf* Lamprecht, *loc. cit.*, p. 659.
¶ "This outer existent is not literally grasped; only its character is grasped" (*Critical Realism*, p. 32).

logically and in principle, with physical things themselves. On this particular point, however, there is some ambiguity, so far at least as Drake is concerned. He distinguishes between "characteristics of objects" and "objects themselves". "Characteristics appear to us; objects themselves," on the other hand, "do not get within our consciousness; the physical existent itself does not get within experience; knowledge is a beholding of its nature".* But since "objects themselves" are indubitably real—for otherwise ontological realism vanishes—and since again our instinctive belief in their reality is well founded—for if not, then epistemological realism vanishes also—"objects" and their "characteristics" must constitute, in virtue of their dual relation to experience, two wholly separate categories, the existence of objects themselves being "private, incommunicable". In an earlier passage however we find that "what we perceive . . . is the outer object itself", while again "we directly perceive . . . the character of objects"; † whence it follows that "object" and "character" are here not distinct, but identical.

2. So far as the main trend of the volume is considered, however, this ambiguity may be disregarded; for as is evident from Strong's later treatment, there is a fundamental and universal distinction between "objects themselves" and their "characteristics"; it is not a mere question of degree or extent or inclusiveness. If then "objects themselves do not get within our consciousness" it becomes necessary to examine the grounds for asserting the real existence of objects as distinct from their apparent or perceived characters.

This assertion rests on instinctive feeling or belief. "We instinctively feel these appearances to be the characters of real objects. . . . We may consider our instinctive and actually unescapable belief justified." ‡ There is here

* *Critical Realism*, pp. 24, 29.

† *Ibid.*, pp. 4, 24.

‡ *Ibid.*, p. 6. *Cf.* p. 195: "our instinctive assertion of" the physical world, which we "affirm through the pressure and suggestion of experience".

raised a principle of profound philosophic importance; but its real significance has been radically misapprehended and demands therefore careful analysis. For in one sense *all* our beliefs and conclusions are unescapable and—from that point of view—instinctive. Whatever it is that we believe, we believe because, in the end, we cannot help so doing. There is always some reason or ground, logical or other, which compels us to modify or abandon conclusions previously accepted; and no one reflectively adopts a new position except on grounds which seem to him at the time irresistible. But it is the peculiar task of philosophy to examine and criticize all these bases of belief; and, simply because it is essentially critical, philosophy can never, *as* philosophy, rest finally on any basis which is *merely* instinctive and nothing more. This however does not mean that purely instinctive beliefs (if there be any such) are never satisfactory and must never be entertained; it simply means that such beliefs are never *philosophically* satisfactory, and can never therefore be accepted as final *philosophic* deliverances. There is always a fundamental difference between instinctive beliefs accepted purely as instinctive, and instinctive beliefs for which, upon reflective analysis, some non-instinctive basis can be discovered. The second type may be philosophical, but the first can never be so. For " nothing can have validity for thought which has not come before its judgment seat, and been then justified as admissible ".*

Of this general principle the variety of beliefs in the real existence of the external world is an outstanding example. For everyone begins with an uncritical and unquestioning acceptance of its reality; while in the case of the naïve realist this attitude has become more or less rationalized insofar as he bases his acceptance on his " senses ", by which he means perception; and every form of realism merely carries further—it does not reject nor subvert, as does *e.g.* subjectivism or solipsism—the critical analysis thus initiated in ordinary experience. All realisms, in other words, must finally rest, exactly as

* Hegel, *Philosophy of Religion*, vol. iii. p. 161.

naïve realism does, upon the process and content of perception—upon this content as more keenly criticized and more rigidly tested; and this analysis must be pursued to a final verdict. If then this content is regarded as not in itself physical, two alternatives arise: either physical reality is never ontologically identical with perceived content, and therefore, since there is no other mode of directly apprehending it, this reality is noumenal; or realism must fall back on an instinctive, but non-philosophic, belief in the known existence of physical reality.

This dilemma faces Critical Realism. If it maintains its universal distinction between physical things themselves beyond our consciousness, and their perceived or apparent sense-characters, then it becomes a noumenalism. But if on the other hand it founds its affirmations on instinctive belief, it forfeits all title to be regarded as a philosophic system, whatever other merits it may possess. Or at best it can become a philosophy only of the content of perception as distinct from physical reality itself.

3. Doubtless it still remains possible to hold that perception is directly of things and not solely of content. "Suppose," continues Strong, "the thing I look at is a fire; the datum is not the mere quality light, but something luminous situated at a certain distance"; the critical realist, in short, "sees no reason why (the object of perception) should not be called the direct object".* But this directness of perception occurs only in precisely the same sense that memory, thought and conception are direct; "the principle", we find, "is not different in perception". Such an interpretation of "direct" perception, however, overlooks a feature in the entire situation which is of vital importance in the theory of knowledge, and rests therefore upon a failure to apprehend the true relation between these purely ideational processes and perception itself. For while the non-perceptual functions are undeniably direct, still their directness is of a kind far removed from the imme-

* *Mind, loc. cit.*, p. 316. *Critical Realism*, p. 103.

diacy of perception, simply because the former necessarily succeed and are based upon the latter, and always therefore, implicitly or explicitly, refer back to it for their own substantiation. They can never sustain a conflict with veridical perception, although they may supplement it with ideal content which itself may be extremely abstract. The *ultimate* appeal must always be to perception; "all judgment is directly or indirectly attached to the reality which is presented through perception".* If perception is direct, then memory and thought, so far as they are concerned with the same objects and remain free from error, will be direct also. But their own immediacy is always the result of the prior immediacy of perception. It is therefore wholly illogical to adduce the former as evidence for its own perceptual basis; the argument is obviously circular because it assumes the very point at issue.

The directness of ideation then is really of a secondary order as compared with the primary immediacy of perception, which rests on no cognitive function more fundamental than itself. In regard to this, as we have already seen, naïve realism is far too sanguine. But just as it is too absolute in one direction, so Critical Realism goes to too great an extreme in the other; it carries its critical process so far that it defeats its own aim and undermines its own basis. For every apprehended element without exception becomes distinguished from physical reality as a "content" or "essence" which can never be, under any conditions, existentially identical with it. "The utmost that cognition can do is to show me an essence, which is the essence of the object. An essence is thus the entire concrete nature of a thing, in abstraction from its existence. Even in normal perception, the appearance presented by the use of a sensation in order to mean an object *is* not the object itself".† The abstraction, therefore, is much more than merely nominal or conceptual; for it implies the ontological severance between cause and effect, so that

* Bosanquet, *Logic*, vol. i. p. 137. *Cf. ante*, p. 27, on scientific observation.

† *Mind, loc. cit.*, pp. 319, 316.

" cognition rests on causality. An outer object acts on the body and calls forth a visual sensation . . . impressions on us, produced by its action on our bodies, and used as signs, but not a part of it. They are only visions of it, and as unsubstantial as visions proverbially are ".* Thus of the perceived characteristics originally regarded as existentially inherent in the physical thing not one finally remains inherent—they are all transferred to the category of content and so deprived of their existential physical status. Every coin which is tendered for examination by naïve realism is degraded by the critical realist into a mere token. Certainly our cognitive activities are asserted to go on by its means quite as well as before; our wealth remains intact, to be just as readily employed and computed, if we will but recognize that this must be done by means of scrip instead of gold. We are offered, in short, securities which are absolutely sound, but which are also absolutely irredeemable.

But the more this distinction is insisted upon the more do the difficulties of Critical Realism accumulate; for as it develops, its original negative description of the content or essence as non-physical imperceptibly changes into its definite designation as purely subjective, so that we may easily trace " the sliding scale into which Critical Realism is driven by the total impossibility of sustaining its conception in its purity "; † and the critic, in his dread of the Scylla of naïve realism, is finally overwhelmed in the Charybdis of subjectivism, from which he attempts to escape on a raft of representationism. For " the content which we apprehend must have the property of reproducing something about the object, of conveying in its own medium the form of the object. The parts of a sensation have the same spatial arrangement as the parts of the object. Knowledge is the insight into the nature of the object that is made possible by the contents which reflect it in consciousness ".‡

* *Mind*, pp. 316–319. *Cf.* p. 203, " causally based agreement between the physical existent perceived and the content of perception ".

† Bosanquet, *Meeting of Extremes*, p. 137.

‡ *Critical Realism*, pp. 218, 200. *Mind, loc. cit.*, p. 318.

Here is the dawn of representation; the object is "reproduced" or "reflected in consciousness"; after which, *facilis descensus Averno*. For "what appear to us as physical things are in themselves of psychic nature. . . . The organism has perfected the agreement between the subjective datum and the object of perception"; * so that the earlier metaphor of "reflection" has given place to a more definite and intelligible "agreement". Finally "the knower is confined to the (subjective) datum, and can never literally inspect the existent which he affirms and claims to know. . . . Internally, or in the percipient himself, we have the content of perception".† How, if this is the case, the percipient can ever cognize the asserted "agreement" remains quite inexplicable; so inexplicable indeed that we are irresistibly reminded, by this uninterrupted transference of all characters to the sphere of the psychical, of the classic encounter between Alice and the Cheshire Cat. It will be recalled that this unique animal slowly faded away, till finally nothing remained within Alice's perceptual field except its grin. Precisely so does the physical object lose all its perceived characters (as physical) until there is not even a grin left. "I've often seen," exclaimed Alice, who was of course a naïve realist, "a cat without a grin, but never a grin without a cat." Had a critical realist been present, however, he would have assured her not only that the entire animal still existed, but also—what is here still more important—that she still continued to perceive it exactly as before! For the conversion into "essence" in no degree interferes with perception; it is rather the means by which it is effected. "I perceive concrete things . . . co-real with the percipient. . . . Thinghood and perception go together."‡ It is not that we know things, or assume them, or simply believe that they exist. Rather things are perceived by the critical realist with the same actuality and fullness of detail, though not in the same manner, as by the naïve realist. The result

* *Critical Realism*, pp. 202, 240.
† *Ibid.*, pp. 203, 196.
‡ *Ibid.*, pp. 196, 197.

in each case is precisely the same, for each alike perceives physical things.(2)

But the two principles which in conjunction form the basis of Critical Realism—that is the subjectivity of all perceptual content together with the physical nature, in the same sense as that of naïve realism, of the things perceived —cannot logically be held at the same time ; each necessarily involves the abandonment of the other. If all physical qualities are merely subjective character complexes, then physical things cannot be perceived, though they may possibly be known, or postulated, or believed in. On the other hand, if physical things are themselves perceived—again in the sense of naïve realism—then some concessions must be made to its standpoint as a serious theory of knowledge. Its " qualities " must be not simply reflective nor reproductive nor representative of the thing, but ontologically identical with it.

For if, as Critical Realism contends, all the content involved is, and always has been, subjective, then, though there certainly might have been realists of some type or other, there could never have been any naïve realists in the world at all ; and since critical realism is confessedly a development from the naïve type, there could have been no critical realists either. We may apply here once again the previously quoted passage from Stout : " I maintain that if (sensed contents) were not material but mental we could not know anything about a material world. We should not even have the thought of such a world so as to be able to raise the question whether it exists or not." In other words, those problems which actually confront epistemology would never have arisen. For they all originate in the contrast which is set up by naïve realism between objective and subjective, external and internal, matter and mind, or whatever other terms express its dichotomy of the world. This rests ultimately on certain deliverances of perceptive experience ; it can indeed have no other possible basis, since perception is accepted as being foundational in all knowledge. But if now the whole content of perception is subjective it would have been

impossible for this contrast, in its actual form, ever to have been established, simply because there would have been nothing whatever in the perceived world to suggest it to the experient ; it would have had no perceived basis actually, and could not conceivably have acquired any other. It cannot be argued, *e.g.* that it arises from spatiality under any such guise as Russell's two-spaces theory, or Lotze's spacelessness of the real. For all the characters of perceived space, like those of every other perceived entity, are, by the critico-realist hypothesis, themselves subjective. Universal subjectivity of the basal elements of experience, in short, would render impossible (actually) and inconceivable (theoretically) that contrast between subjective and objective which, as a matter of fact, has actually arisen in the development of knowledge ; for naïve realism, despite all its defects, is after all one definite stage in that evolution.

4. This conclusion in itself vitiates the entire critico-realist standpoint. But further considerations may be advanced in its support.

It may be argued that the practical demands of individual life and social intercourse necessitate that category of physical objectivity which both naïve and critical realist alike employ. This, indeed, is implied in Strong's principle that cognition leads us " to act as if the essence were real " ; but this need not necessarily be the case at all. For low types of consciousness it can make no difference whether the " world " is all subjective or all objective ; in both cases life would proceed equally well, since neither category has any significance for the experient ; while to regard the whole content at such stages as theoretically subjective is a gratuitous assumption. In the opposite direction we find that when mind attains its highest levels the abstract thinker, the mathematician, poets and artists, perhaps the mystic likewise, live in and react to a sphere which completely lacks physical objectivity, though it has, of course, a physically objective basis. All that is thus theoretically necessary for such efficient reaction to the environment is the selection, consciously or otherwise, of certain elements out of the whole to serve as types, quite irrespective of

physical objectivity and subjectivity, which other elements may then represent or reproduce; mathematical symbols may be cited as one widely ranging instance of this general procedure.

This naturally leads to the representative function which is assigned by Critical Realism to subjective perceptual content. Drake *e.g.* accepts—but only provisionally—the distinction between primary and secondary qualities; and this raises a dilemma already familiar in one form or another. The desk "really is oblong, but not in itself black, except in the sense that it has certain definite characteristics which cause the character-trait black to appear to us." * If now the characteristics which cause black to appear are themselves black, as other allied characteristics are themselves oblong, where is the necessity for the character trait at all? It is wholly gratuitous to lay down *a priori* limits to what lies within the capacity of mind to perceive; and it seems sheer superfluity to require a black content whereby to perceive a black object whose blackness is similar to that of the content, especially if, still further, one blackness is subjective and transient while the other is objective and permanent. On the other hand, if the object's characteristic is not black, in the same sense as the content is black, then what is it? Obviously, we cannot tell; our ignorance is complete and final, since we can neither perceive nor conceive its quality or nature; which means again that the physical thing is a noumenon, and perception a pure misnomer.

But as a matter of fact Critical Realism does assert *a priori* limits to the capacity of perception. "What," inquires Sellars, "is the fundamental postulate of knowledge? It is the cognitive value of the idea." † But this principle, thus advanced as the basis of a theory of perception, plainly commits realism in advance to a complete dependence on subjective ideas. It postulates an epistemology resting at bottom on ideas and thus begs the main issue from the very outset. The fundamental postulate of epistemology is not the cognitive value of ideas, but the

* *Critical Realism*, pp. 23, 24. † *Ibid.*, p. 198.

cognitive value of knowledge itself—the obvious fact of knowledge on which Kant based his reaction against Hume. This of course is far from being the mere tautology that it may seem to be ; for it means that knowledge, whatever be the precise character of its contributory processes, and however it may be theoretically accounted for, is always knowledge of reality. This is true even for Kant, despite his apparent subjectivism.* Certainly some ideas have cognitive value ; it may, indeed, prove to be the case that nothing has such value except ideas. But such a principle can be adopted only at the conclusion of our inquiry as a logically established result ; it cannot be advanced as a fundamental postulate from the outset. To do so is simply to base realism firstly on that radically defective sensationalistic tradition which vitiates so much current psychology, and which it should be the first task of realism to criticize and confute ; and secondly on a misrepresentation of the true meaning of the term " idea " ; a point to which I shall return later on.

I conclude therefore that in denying that existential unity of sense-perceived content with physical reality which my earlier chapters endeavour to establish, Critical Realism has failed to make good its claim to be regarded as a true Realism.

REFERENCES TO CHAPTER XI

1. (P. 124). Appearances " are not existences, but only sensations insofar as they are used as signs ; they are always (in cases where they give knowledge) accompanied by the belief to the effect that an object exists, having the characters which the appearance shows us. This belief is not a formulated one ; it is only expressed in our acting as if the appearance showed us an object. The object is thus not inferred from the appearance, but directly known through it " (*Mind*, vol. xxxi. p. 313). *Cf.* Broad's denial of inference, p. 177 below. The opinion that Critical Realism is ultimately noumenalistic finds support from Bosanquet and from Lamprecht. " The critical realist's view, being motived as it is by an absolute severance between essence and existent, the existent

* *Cf. ante*, p. 22.

comes necessarily to belong, like the Kantian noumenon, to a different order of being from the experienced content" (*Meeting of Extremes*, p. 138; *cf.* pp. 146, 149). "Pratt reduces the passage from the essence in thought to the existing object to a moral basis strangely reminiscent of Kant's practical reason" (*Journal of Philosophy*, vol. xix. p. 660).

2. (P. 133). "The object is not inferred from the appearance, but directly known through it. If the essence is truly the essence of the object, the essence given and the essence embodied in the object are not two but one" (*Mind*, *loc. cit.*, p. 313; *Critical Realism*, pp. 239, 241).

CHAPTER XII

NEW REALISM AND THE NATURE OF CONSCIOUSNESS

1. New Realism has already been subjected to such extensive criticism that I think it will be sufficient to restrict my own remarks to the consideration of its treatment of the nature of consciousness.

With regard then to consciousness, much more is involved here than mere terminology or mode of expression. We may begin with the sound realistic principle that "the content of knowledge, that which lies in or before the mind when knowledge takes place, is numerically identical with the thing known."(1) Here the apprehended manifold is quite definitely a "content"—either of knowledge or of consciousness; and in accordance with this cognition becomes a process, or an activity of the knower.(2) There certainly appears to be some confusion here between knowledge and perception;* while "introspection" is usually regarded as revealing the subjective contents and acts of the mind rather than physical reality; these however are minor points of no vital importance.

But when we turn to Professor Holt's treatment of "illusory experience" there arises—so far, at least, as his actual expression of his views is concerned—a radical confusion between consciousness itself and the contents of consciousness. He certainly begins by referring to the "contents of consciousness"—to the "direct connection between the contents of consciousness and changes of the nervous system." † But on the succeeding page these "contents" have become consciousness itself; and that

* *Cf. ante*, p. 19, n. †.

† *Ibid.*, p. 353.

" manifold " which we have just seen to be, in one of its aspects, a part of " the so-called external world,"(3) now constitutes, not the object or content of mind, but mind itself. For " consciousness or mind is a cross-section of the universe, selected by the nervous system. The elements or parts of the universe selected, and thus included in the class mind, are all elements or parts to which the nervous system makes a specific response."

Thus the initial standpoint of New Realism has here been altogether abandoned. We no longer find a process of cognition on the part of the knower ; all we have is a selective responsive reaction of the nervous system. But this conclusion at once deprives the term " realism " of all its meaning. For New Realism is essentially an attack on subjectivism ; " to get rid of subjectivism is the preëminent issue ; new realism is, broadly speaking, a return to natural realism "—to a theory of knowledge therefore which recognizes an ontological difference between the physical and the mental, instead of regarding the physical as an illusory aspect or phase of a reality that is in itself psychical.(4) But if certain elements are selected from the physical universe, and if that selection is altogether the work of the nervous system which is likewise physical, then the final result must also be physical and nothing other. We do not alter this result by calling it " mind " or " consciousness " ; for it remains at the end what it was at the beginning—physical ; and while we have certainly got " rid of subjectivism " it is only at the cost of getting rid of mind as well ; once more, then, the baby has been emptied out with the bath water. It may be, however, that the baby *is* the bath water ; for " no difference of substance exists between mental and physical elements. Mind and matter consist of the same stuff " ; thus consciousness ceases entirely to be an activity or process, and becomes instead a totally different affair—it becomes " a class of things " (5)—a " class " of physical things which is constituted by the operation of another physical thing—the nervous system.

There are two serious objections to this argument. In

the first place, if we consider the response of the nervous system simply *as* a response, and without any reference at the moment to the mode of its operation, we find it exactly paralleled in type by the relations between both a magnet and a gyroscope to the physical environment. For their responses also are essentially selective—they discriminate between those objects or conditions in the environment which affect these mechanical systems and those which are indifferent to them. If therefore there is nothing to be considered here beyond the responsive reaction, it is quite logical to regard the surrounding iron and steel as the " mind " in the case of the magnet, or certain fields of force as the " mind " where the gyroscope is concerned; for again it must be remembered that magnet, gyroscope and nervous system are all alike physical.* If on the other hand it is contended that nevertheless the nervous system has its own unique physical organization our difficulties are greatly increased. For in the case of both magnet and gyroscope it is possible to discover and to measure the method of transmission of their reaction; and this, like the objects concerned, is a purely physical phenomenon. But the ultimate and complete reactive influence of the nervous system is altogether beyond the capacity of the physicist either to trace or to calculate; it is entirely excluded therefore from the province of physics, and relegated, as an absolutely unique type of relation, to psychology; so that to cite the vital character of nervous processes in support of the neo-realist standpoint is at once to establish the existence of a correlative responsive reaction which these processes underlie, but which itself is *non-physical*; and it is this final reaction, of course, which is generally denoted by " mind " or " consciousness ", or by that " agency which is the knower " of the New Realists themselves. But these considerations are completely ignored in the course of Holt's argument, so that " consciousness ", as we have just seen, becomes merely one class of physical things.

* This remains true even if physical and psychical are but aspects of a more fundamental substance, as Holt has just suggested.

The second objection is still more fundamental. For while it is certainly conceivable that mind and matter are but phases of one and the same reality—as *e.g.* with Spinoza's attributes of thought and extension—still this is a principle which Realism, at least, is precluded by its very nature from advancing as an argument in its own support against subjectivism or subjective idealism. The realistic critical attitude, that is, reacts upon the philosophic character of realism itself—" the grounds on which realism rejects subjectivism determine to some extent the superstructure which is to be reared in its place ".* It seems to me obvious therefore that the realist cannot logically maintain the external world to be non-psychical, and then proceed to identify it with mind as an aspect universally associated with materiality.† Spinoza, undoubtedly, would be excluded from the neo-realist hexarchy; for he maintained that " everyone judges of things according to the state of his brain, or rather mistakes for things the forms of his imagination. Brains differ as completely as palates. All the explanations commonly given of nature are mere modes of imagining, and do not indicate the true nature of anything, but only the constitution of the imagination ".‡ Plainly the heights of Spinozistic metaphysics are a perilous playground for modern realists.

2. Perry's treatment of the nature of mind is substantially identical with Holt's and exhibits, I think, the same radical defects. " The crucial problem for contemporary philosophy is the problem of knowledge; and the problem of knowledge " (to begin with) " reduces in the last analysis to the problem of the relation between a mind and that which is related to a mind as its object. The constant feature of this relationship is *mind* ."(6) As he proceeds, however, there again arises that ambiguity as to the character of this " object " which I have already referred to § as springing from its

* *New Realism*, p. 31.

† It should be noted here, however, that Montague favours the view " that all matter has something psychical about it " (*Ibid.*, p. 272, n.).

‡ *Ethics*, Part I, Appendix.

§ *Ante*, p. 17.

being called "mental content . . . the elements of the introspective manifold". Bearing this difficulty in mind, we find that this content or manifold possesses "a peculiar interrelation . . . is distinguished by the *way* in which these elements are composed"; * and thus, exactly as in the case of Holt, "consciousness is only a form of connection of *objects*, a relation between them"; † it cannot therefore be that "relation between a *mind* and its object" which has just been postulated as the basal problem of knowledge.

Thus "the nature of mind", as mind, still requires consideration; and it is the "action of mind" that confers on its contents "their mental character", and so sets up that interrelation between them which is actual consciousness. But the nature of consciousness as thus defined remains highly obscure and confused; for there may arise "a consciousness of *a* and a consciousness of *b*"; these are distinct phenomena, and never identical with "a consciousness of *a* and *b*".‡ Now consciousness has just been described as a unique interrelation between *objects*; what then is the object to which *a* is related when there exists the "consciousness of *a*"? No such correlated object is instanced by Perry; and such an object is in fact excluded by the given conditions. For if there were an object *x* (let us say) related to *a* through that connection which is "consciousness", then there would arise not the "consciousness of *a*" but the "consciousness of *a* and *x*"; in other words consciousness of a *single* element would be—from the very terms of the definition—absolutely impossible; the minimum number of objects in "consciousness" would necessarily be two; while if, on the other hand, the "consciousness of *a*" alone is really possible—as it certainly is in my opinion—then Perry's definition must be abandoned, and consciousness be regarded as the relation between the apprehended object and the knower.§ The difficulty

* *Op. cit.*, p. 277. On Introspection, *cf. ante*, p. 138.

† *Ibid.*, p. 278; citing Woodbridge and James; but my own italics here.

‡ *Ibid.*, p. 284.

§ *Cf. ante*, p. 138, n. (2).

becomes still greater when we refer to "the conscious agent himself"; * for if consciousness is essentially a relation between *contents*, then a "conscious *agent*" is an impossibility.

But whatever may be the true character of consciousness, the "action of mind" finally becomes for Perry, as for Holt, "a property of the physical organism".† This property is certainly unique in its nature, and thus distinguishes mental activity from every other form of organic functioning. But it nonetheless remains a *physical* activity directed towards the physical external world.‡ "A mind is a complex so organized as to act interestedly . . that character distinguishes the living organism . . . the natural mind is thus an organism possessing interest, nervous system and contents . . . when these factors are united, they compose a whole mind". § This account of the phenomena seems to me a fresh instance of Hamlet without the Prince. With the exception of the vague term "interest", the entities and processes involved all fall within physics and physiology; not one is a matter for purely psychological investigation. The "life" of mind is here wholly reduced to that of the physical organism; while "interest" may equally well be discerned (as I have already argued) in the selective responses of the magnet and the gyroscope to their respective environments, or even in the perturbations of every planetary orbit. On the other hand, everything which directly concerns psychology is excluded—pleasure, pain, desire, deliberation, reflection, emotion; of these nothing remains except their physiological concomitants, which, together with the external physical factors which arouse them, are then regarded as the "whole mind". Even the distinctive "interest" is "primarily biological rather than psychological".‖

That the final result of Perry's general survey of the situation is to explain away mind altogether is confirmed by his detailed treatment. "Several sounds heard jointly

* *Ibid.*, p. 285.

† P. 298.

‡ I am considering here perception, which is admitted to be the crucial problem for realism; and the position adopted here determines the entire realistic theory of mind.

§ Pp. 303–305.

‖ *Ibid.*, p. 304.

compose a mental unity. But what is the nature of hearing? The way it *feels* to hear has little if anything to do with the matter. For listening and hearing are specific operations of the nervous system."(7) To a certain extent, of course, all this is undoubtedly true; but it is the least important part of the truth. For if it were exhaustively true, then obviously hearing and recollecting and thinking would be phenomena for physiological investigation; whereas as a matter of fact the physiologist has always excluded these from his own proper subject-matter, and has confined his researches strictly to their physiological antecedents.

When this principle is extended to knowledge and to the relation between mind and body we have once more that identification of the physical with the psychical which, in its positive aspect, we have found in Holt's theory, and on its negative side in Russell's epistemology. Positively then, " the *elements* of the physical and the psychical are the same " ; negatively, " the colour itself is *neither physical nor psychical* " ; * and I have already suggested that the latter standpoint is, philosophically, " an evasion of a fundamental problem ".† Here it is necessary only to notice the length to which this identification is carried. For " the same elements compose both mind and body, and embrace both sense *qualia* and also logical abstractions ".‡

If our experience were wholly perceptual—as we may suppose the experience of some lowly animals to be—it is possible that such a theory would apply to all the facts; and we might then say that " when I perceive Mars, the sun's satellite (body) is my percept (mind)".§ Even at this primitive level, however, there are present within experience elements which are not existentially, though they may be logically, identical with the physical matter of the planet—the images and ideas indispensable to perception, and falling within the province of psychology as the matter in the province of physics; and for realism to identify these, directly or indirectly, is not to combat subjectivism, but to surrender to it. And when we advance beyond perception

* *Ibid.*, p. 310. The positive view is adopted from Mach.
† *Ante*, p. 116. ‡ *Ibid.*, p. 311. § *Ibid.*

to thought proper the failure of the attempt becomes obvious; for thought and thing at once appear in their deeply contrasted natures; all serious effort to unify these disappears, and the principle of the identity of the physical and the psychical becomes merely verbal. "In mediate knowledge, or discursive thought, the knowledge and the thing known possess little, if any, identical content. The theory of immanence explains these cases by saying that the thing thought about, and the thought, are both experienced." * Of course they are; but this does not imply that either they, or their wholly hypothetic elements, are identical. The very problem of realism is the manner in which knowledge arises when this fundamental difference between mind and matter is duly recognized instead of being suppressed by some obscure hypothesis of their hidden identity; and it is quite sufficient, I think, to cite against Perry the treatment of "experience" by his fellow neo-realist, Montague: "The only world that we can know or discuss is the world that we experience. But to say this is very different from saying that experience, as a conscious process, is a *sine quâ non* of real objects. If we allow ourselves to play fast and loose with the word, we get a theory which is in reality thorough-going subjectivism, but which has the appearance of a compromise between realism and subjectivism"; † and thus my own suggestion of a surrender to subjectivism is amply confirmed.

3. Professor Montague's protest holds good equally against Holt's fuller treatment in his *Concept of Consciousness*. For he begins with a "loose" usage of the term "experience" which must be questioned from the very outset. It is simply impossible to accept his initial assertion that "experience *is* a highly complicated aggregate of objects . . . *consists of* them", the "objects" in question being "whatever one happens to meet with". ‡ This obviously ignores the patent distinction between "experi-

* *Ibid.*, p. 312.

† *The New Realism*, p. 259.

‡ Pp. 78, 77; my italics. *Cf.* "all the objects that I know are in the aggregate called my experience . . . the objects of experience together compose experience" (pp. 80, 82).

ence " in itself and as such, and that which is experienced—between the " *ing* " and the " *ed* " of Alexander,* and it at once leads to Holt's further statement that " in fact minds or ideas are (the) substance (of) the simpler entities of being ". It is altogether unjustifiable thus to employ " experience " in order to express the fact that " a vast variety of component objects simply *is* ", and to introduce the principle that " the distinction between mind and matter is not to be wiped out, but to be made precise ".†

At this point, however, Holt executes a remarkable *volte-face*; for after first adopting " the position (of) Avenarius, that our world is a world of pure experience ", he suddenly abandons this and maintains that " our starting-point is not a world in which all is experience; our point of departure is a world of pure being ".(8) But whether this means that the two standpoints are to be taken in connection with one another, or that the second supplants the first, does not materially affect the later course of his argument so far as realism is concerned. For Holt proceeds to reduce the external world to " mathematical entities or logical concepts "; and these, still further, are " neutral entities ".‡ Any adequate criticism of this conclusion would demand a specific inquiry into the nature of logic and mathematics, and this again a complete epistemology. It must therefore be sufficient to point out that his appeal to modern Physics can no longer be sustained.§ But even if this were not the case, the conversion of the perceived world into " logical concepts " plainly constitutes that " surrender to subjectivism " to which I have already referred. For whether we start from " pure experience " or from " pure being ", it is obvious that all concepts and all " mathematical entities " are the final products of long and intricate thought processes of a very high order; they are, in other words, the last results of continued abstraction from the primary objects of sense-

* *Ante*, p. 18, n. (7). *Cf.* however p. 87 or " knower and known ".

† Pp. 79, 78, 84.

‡ " The elements (space, points, masses) to which the physicist has reduced matter are neutral entities " (p. 118).

§ P. 116: " the most competent physicists. . . ." *Cf.* p. 60 *ante*.

perception; and this again means that many of the characteristics of these objects have been eliminated and disregarded as being irrelevant to the physicist's restricted inquiries.* Concepts, then, are patently mental and psychical, and to identify them with the physicist's reals is sheer subjectivism.†

Nor, again, can these reals be described as "neutral entities". For if they actually *are* concepts they must be psychical; and if, alternatively, they are not thus identified with concepts, but are regarded as existents to which our concepts refer—as reals which our ideas and "mathematical entities" signify or represent—then they cannot be neutral. In accordance with Holt's own treatment of this aspect of the problem,‡ they must be definitely distinguished from the category of the psychical so as to constitute the realm of physical or material reality.

And this further implies that Holt's more fully developed theory of consciousness in the volume now under consideration merely repeats that "confusion between consciousness itself and the contents of consciousness" already referred to earlier in the present chapter.§ Once again we begin with the realistic principle that "all the objects that one perceives, including the so-called 'secondary qualities,' are 'out there' just where and as they seem to be"; and this is followed by the reduction of these objects to "a neutral manifold". I have just argued that any such reduction is wholly illogical; but even if, simply for argument's sake, this point be conceded, the final fallacy remains unaffected. For "this neutral cross-section outside of the nervous system . . . coincides exactly with the list of objects of which we say that we are conscious". Subject to my purely argumentative concession, this again may be accepted; and then, without

* "Restricted", that is, relatively to the entire sphere of "pure experience"; to ignore this principle is obviously to abandon "pure experience" itself.

† Holt's expressions unmistakably imply this identification; "most of his entities *are* laws, and these *are* equations . . . concepts" (p. 118); my italics. *Cf.* p. 170: "velocities *are* purely mathematical quantities".

‡ Chap. vi.: "The Substance of Ideas".

§ P. 138 *ante*.

any further elucidation whatever, these "objects of which we are conscious"—the "neutral cross-section or manifold"—is "the manifold of our sensations, perceptions and ideas:—it *is consciousness*";* and thus consciousness becomes identified with that of which we are conscious—the conscious activity with its objects—the processes of sensation and perception with sensed content and percepts—our ideas with the real existents of which they are ideas. Such a degree of patent confusion refutes itself and requires therefore no further comment.

There still remains to be considered the Realist system of Dr. Broad. This however will be best approached after a survey of the causational aspects of conscious experience.

REFERENCES TO CHAPTER XII

1. (P. 138). "All things are known through being themselves brought directly into that relation in which they are said to be apprehended. Things when consciousness is had of them become themselves contents of consciousness; and the same things thus figure both in the so-called external world and in the manifold which introspection reveals" (*New Realism*, pp. 34, 35).

2. (P. 138). "Some variety of agency or process, which is the knower" (p. 35). "In virtue of being perceived, (things) constitute content" (p. 143).

3. (P. 139). It is almost superfluous to add that the existence of this world is, for New Realism, independent of the knowing mind. "To be content of a mind, is not to be dependent on a mind" (p. 139).

4. (P. 139). "The neo-realist accords full ontological status to the things of thought as well as to the things of sense, to logical entities as well as physical entities, to subsistents as well as existents" (*Ibid.*, pp. 10, 35).

5. (P. 139). *Ibid.*, p. 355. The similarity between this standpoint and that of Russell is obvious. I think I have already dealt sufficiently with its difficulties in Chapter X.

6. (P. 141). *Present Philosophical Tendencies*, pp. 272, 273. But on the "crucial problem" contrast Holt: "the differentia of *idealistic* philosophers is their common assignment of first importance to the problem of knowledge" (*New Realism*, p. 359). My italics.

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* Pp. 181, 182. My italics.

7. (P. 144). " The link of recollection lies in a retrospective functioning of my body. . . . The same consideration will apply also to thought. Abstractions are not possessed by me in any exclusive sense. The fact that they are my contents means that they are somehow bound up with the history of my nervous system " (*Ibid.*, pp. 285, 296, 297).

8. (P. 146). Pp. 77, 86. Much of Holt's criticism is directed against " latter-day philosophy—idealism " (p. 78), on which curious identification *cf.* Chapters XIX, XX below. In the light of my outline of Hegel's own position, together with his treatment of " pure Being ", Holt's implied criticisms of this thinker in his Preface seem very questionable.

CHAPTER XIII

REALISM, EXPERIENCE AND CAUSATION

1. The principle of Causality has always been an important and perplexing factor in epistemology. The patent disparateness between "mind" and "matter" renders it extraordinarily difficult to trace the causal connections between them, to such a degree that the parallelistic hypothesis seeks to dispense with all causative associations except when restricted to the material and the psychological series as independent of each other; so that while physical causes determine the one and mental causes the other, nervous changes themselves are merely contemporaneous with, but do not otherwise determine, the processes occurring in consciousness; while epiphenomenalism still further confines true causation to the material universe alone.

The nature of causation itself, of course, is still a problem which is far from being finally solved. But this dubiety need not affect the epistemological aspects of the situation so far, at least, as Realism is concerned. For since this philosophy must regard matter, not only as preceding mind in the course of terrestrial evolution, but further as finally becoming, when organized into cerebral structures, the physical basis of mind, it is immaterial what the precise character of causation may prove to be. It is sufficient that the causal principles of physical science be accepted as also those of mental phenomena; one and the same type, that is, is manifested in both spheres—if, indeed, it were at all conceivable that two disparate types of determinative connection could be included under the one term "causation."

For Realism then all the activities which constitute experience are essentially natural processes, in the sense that they conform to the same ultimate principles of action as characterize physical, chemical and physiological changes. This is plainly evident in all the phenomena of redintegration, association and the " unconscious ". But it implies neither that physical entities and processes are somehow transformed into psychical, as we have seen is suggested by Russell, nor that the mental is but one aspect of the material, as in some forms of panpsychism and " mind dust " theories, nor again that the self, in all its protean manifestations, is not a fundamentally unique entity within Reality as a whole. When experience is thus brought within the category of natural causation, however, there arise the problems of the causal relation between the external world and the process of perception itself; and here we find the least logical aspects of our original naïve realism.

I have already argued that " owing to their relative uninterruptedness, clearness, and diversity, as one of the main subdivisions of the whole of sense-experience, the seen factors become dominant, so that they ultimately sustain our consciousness of their previously associated factors as existent ",* and have endeavoured to trace the implications of this principle in its bearing upon the meaning of " existence ". If we now consider the same fact from a different standpoint we discover two basal features which, as experience develops, come naturally to underlie the plain man's interpretation of his acquaintance with the physical world in accordance with those vague notions of causality that, to him, seem sufficient. These two features are " relative uninterruptedness " and " association "; and the phases of experience which they characterize finally come to be regarded as causative.

For these features plainly imply the necessary—though it may be not sufficient—basis of all causation—that is the character of invariable sequence. The " relative

* *Ante*, p. 41, with note (7).

uninterruptedness" of the totality of the seen elements of perceptual experience obviously means that all other types of sensed factors are preceded by seen factors; in other words, the relation between seen and non-seen factors becomes one of sequence; an orange *e.g.* is seen far more often and more continuously than it is touched, tasted or smelt, and a clock than it is handled or heard. At the same time the gradually developed but increasingly definite associations between seen and non-seen elements finally assume the form of regular or even invariable sequence; the visible orange, once again, is observed always to taste and feel the same, as a given clock always emits the same sound; and any exceptional instances are found, when their conditions are analysed, to confirm the normal connection.

Thus uninterruptedness and association, as concerned with seen and non-seen percepts, finally yield the general relation of invariable sequence. If now we add a further inevitable consequence of this uninterruptedness of the seen elements, it becomes still easier to trace the development of the plain man's causal theory of his perceptual experience. For, simply because of this unbroken continuity of our visual activity, we remain almost wholly unconscious of it. As an ever-present and but slightly varying element in consciousness it falls below the threshold of consciousness almost entirely; just as with the clothes we constantly wear, so we become almost unconscious of seeing as a mental activity, and limit our attention—normally—to its content or objects.

But we are by no means equally unconscious of our acts of touching or tasting. On the contrary we actually see these bodily movements themselves; so that, while almost unaware of our seeing as a pure activity, we are fully aware of both the activity, and the result, of our hearing and touching; and thus they occur as patent additions to the smooth and unapparent act of seeing.

The inevitable outcome of all these co-operant conditions is that the totality of visible percepts comes to constitute

an ever present basis or background, as referred to which all other types of percepts occur in the relation of more or less regular sequence. On the other hand the visible perceptual whole itself is (so far as immediate experience goes) most frequently preceded by nothing; only on comparatively few occasions do we touch or hear first, and see afterwards. The most usual order is the reverse of this; and thus the visible totality seems to be self-sufficient and self-maintaining. Naturally therefore its principal elements come to be regarded as the causal antecedents of auditory, tangible and other percepts.

The visible qualities of objects thus become their *basal and dominant* qualities, with which their other sensible attributes are fused; though at the same time it is true that whenever these visible properties seem to be dubious they are themselves tested by an appeal to tangible qualities. But generally, for the naïve realist, the material thing is the visible thing; and finally this comes to be regarded as causing its sound, taste and odour, its hardness and tangible shape, to arise within experience, just as it causes bodily pain, or pleasure, or emotional reactions. The experience of these qualities often follows visible contact between the visible thing and the visible body; and then, by analogy with contact of visible things *inter se*, " contact between " develops into " action upon ". This unreflective conclusion is confirmed by the definite localization of visible percepts in visible space; for they rapidly become precise and constant causal centres of reference with which the non-seen percepts, themselves localizable either with great difficulty or not at all, become connected as effects. Finally, by a still further expansion of the same principle, visible " appearances " are taken to be effects of the changes in position or nature either of the visible percipient or of the visible " real " object; and thus practically the whole of perceptual experience comes to be interpreted in terms of causality, consistently enough, at least, for the practical purposes of every-day life.

2. But this practical consistency is soon discovered to

be very far from being theoretically satisfactory; and owing to a combination of circumstances the earlier theories, still widely current in one guise or another, assumed the form of subjectivism or representationism. The weighty philosophic tradition which regarded mind as inherently incapable of apprehending anything different in nature from itself, for that reason regarded its whole content as "ideas"; a conclusion which appeared to find final confirmation in the exacter physiology of nerves and brain which was one of the most valuable results of nineteenth-century science, especially when this became associated with the physics of molecules and atoms which, though themselves imperceptible, were at the same time the ground of all physiological changes. Once this last standpoint was attained it became obvious that the uniqueness and priority assigned by naïve realism to the content of vision were wholly illogical; for both physiologically and psychologically the process of seeing is conditioned in precisely the same way as are all the other modes of sense-awareness; and since it is in no way exceptional it inevitably followed that visible things, instead of being the causes of their non-visible attributes, were ranked with these latter as the effects of the action of atomic and ethereal motions on the atomic structure of the organism; so that reality became a "ballet of bloodless" molecules, which caused or otherwise determined the entire apparent world of immediate experience. In this manner a classical speculation appeared to find its complete substantiation in a curious compound of representationist realism with subjectivism. The material universe was real, but utterly beyond the range of perceptual apprehension; while, on the other hand, the immediately perceived world was so far removed in all its characters from the physically real as to be at best a phenomenal appearance, at worst a subjective illusion.

Some such standpoint as this forms the basis of several current types of Realism. It is manifest alike in Stout's dichotomy between "sensa" and "perceived features of physical existence", in Lotze's theory of "realities,

unspatial, inaccessible to perception, and purely intelligible, which lie at the root of our spatial perceptions",* and in the Critical Realist distinction between "essences" and material things; while a somewhat similar conclusion is the result of Broad's discussion of causation and perception in his *Perception, Physics and Reality*. "There is," he affirms, "some reason for believing and no reason for disbelieving that there exist real counterparts to the figures which all people agree in perceiving by touch"; and this is his logical development of the consideration, already alluded to with reference to visible "reality" and visible "appearances",† that "unless we want to have an immense complication of similar realities that are only perceptible from one position or by one person, we must in many cases reject the instrumental theory; and when we once begin to do this in any case there are good grounds for doing so in all cases"; ‡ the "instrumental theory" here being that which holds that perception, under proper conditions, directly apprehends material things as they actually exist without—in principle—representativeness and with no subjective factors.

Still more recently, and from a more specifically psychological standpoint, the same position has been assumed by Professor Spearman in his able volume on *The Nature of Intelligence and the Principles of Cognition*. "An ordinary percept," he observes, "is something very complex"; and he analyses out seven distinct steps which lead to that "primary sentience" which lies at the basis of all percepts alike. "The whole march of events," he continues, "resolves itself into seven stages which end with nothing more than sentience experienced or lived", the first of the "seven stages" being the existent material thing; and "hence" (he concludes) "the eventual effect of the material thing on consciousness is barred three times over from any likeness to that thing itself"; and "the characters perceived by means of the senses, far from really being any part or parcel of the material things

* *Cf. ante*, pp. 15, 61.
† *Ante*, p. 153.
‡ *Op. cit.*, pp. 275, 267.

themselves, are not even directly concerned with these". What then is "the material thing itself"? It is "the matter of the external world"—the molecules which, by agitating the ethereal medium, "stimulate the organism to perception"; * and so once more we find perception, when considered as a natural causal phenomenon, reduced to a combination of subjective "sentience" and the minimal degree of representation.

Thus the principle of causality, equally in its popular form and in strict scientific theory, appears at first sight to present an insuperable obstacle to the realistic philosophy advocated in my earlier chapters. For according to the naïve realist it is sometimes the real visible thing, and less frequently the tangible thing, that causes the appearance of non-visible or non-tangible qualities, respectively; or, again, the "real" object, under certain conditions, causes its "appearances", as in the case of the various shapes of a table-top seen from different standpoints. In all these cases alike, however, many of the properties of the thing are ranked as secondary or subjective, so that the result is a very restricted type of realism; and when this is in its turn considered scientifically, then the visible (or tangible) thing itself becomes but one of the representative or subjective effects of the wholly imperceptible material universe.

3. Further consideration, however, is sufficient to show that this entire argument, in both its popular and its scientific aspects, though plausible enough as it stands, is wholly fallacious, because it ignores two familiar elements of the problem which, when duly taken into account, completely transform the situation. It is certainly impossible, as has been suggested already at the beginning of the present chapter, to evade the application of causal principles, whatever their final significance may prove to be. But if we retain the distinction already so often insisted upon between the *process* or activity of consciousness in all its modes, and the correlative *object* of this conscious activity, then it becomes possible to regard

* *Op. cit.*, pp. 37–47.

causality as concerned, not with the *object* of sense-awareness, but solely with the *activity* or process; so that the final effect of the causal series is not the object of perception, but rather the process of perception itself, which is concerned with or directed upon that object; and thus the supposedly fundamental distinction between the material external cause and the internal subjective percept or content falls to the ground. If we proceed still further, and combine with this the principle that appearance is always partial reality, then very much of Broad's criticism of naïve realism, in the volume already referred to, is also invalidated.

But before dealing with these positive aspects of the subject I shall show that the full causal theory of the existence of the object of perception is fallacious, whether presented in its popular or in its scientific form.

For according to the first of these, it is the visible * object which in the first place causes the non-visible attributes to arise in our experience; and when it is pointed out that vision, so far as its conditions are concerned, is on exactly the same footing as the other senses, then the visible object becomes itself one of the final effects of the whole causal series. But since it is at the same time the initiating cause, the whole argument becomes obviously circular—the visible object, as cause, now bringing about its own existence as effect; so that the same entity, in short, is both effect and cause. This is undoubtedly the position unreflectively adopted by naïve realists who remain content with an incomplete analysis of the problem. But the same difficulty persists even if this analysis is carried farther to what seems at first sight its valid logical conclusion. For when the circular fallacy just referred to is detected, then the cause of perception becomes transformed into the universe of molecules and energy with which physics is concerned. This solution, satisfactory though it may be so far as mathematical and physical theory is concerned, is obviously replete with its own difficulties. What is the nature of the connection,

* Or tangible, as the case may be; the same argument applies for both.

it must be asked, between this imperceptible universe and the world directly apprehended in sense-perception? All the familiar perplexities of the transformation of material entities into mental at once arise; or we must again revert to some variant of occasionalism, or pre-established harmony, or Spinozistic dualism. More particularly, what is the relation between physical space and time, and those directly perceived existents to which we apply these terms? * For with these ultimate existents our difficulty becomes crucial. It may be conceivable that electrons in vibration cause colour and weight to be experienced. Still electrons move in space of some kind or another, and this motion occupies some sort of time, in exactly the same sense that a stone falls. Do then the space and time of the electrons cause the space and time of the moving stone to spring up in our experience?—the first material, the second mental? If so, then plainly the nature of the ultimately real spatio-temporal universe, which must include within its own confines both of these disparate spaces and times, becomes wholly inconceivable.

All questions of this kind, it seems to me, are absolutely insoluble. For they conceal a still more fundamental fallacy which affects the entire situation. We have just seen that Spearman traces the content of perception to its primary source in the vibrating molecular world of physics. But what, at bottom, is this world? It is simply a world conceived in terms which not only are derived, but which *must* be derived, wholly from the world of sense-perception; for again to quote Spearman, "lived experience does supply a basis whence knowing can be immediately derived." † Physical space, molecules, media, vibration—each and all, so far as they are taken to be concretely real, are mere reproductions of elements whose sole origin lies in the content of immediate perception. It is true that these theoretical entities may be still further refined into abstractions, till finally there remains nothing but mathematical formulæ—a development that is easily traced from the Daltonian atoms to the electronic systems

* *Cf. ante*, p. 26. † *Nature of Intelligence*, p. 48.

of energetics and relativity. But even this final step does not affect the principle with which we are here concerned. No degree of abstraction can carry thought below the primal source of all our experience in sense-perception, however this may be analysed into form and content, or any similar aspects. In the end therefore there are only two alternatives, both equally unsatisfactory. If we endeavour to describe the primary causes of the objects of immediate perception, we are necessarily compelled to describe them in terms of some directly perceived entities or other, no matter how much these may become transformed by thought in so doing. But all such entities are, *ex hypothesi*, the final effects of the causal series that is being investigated; obviously therefore—precisely as in the case of the crude popular causal explanation—the final effects of the whole process are thus transposed to its hypothetical beginning and so erected into the causes of their own existence. This becomes perfectly clear in following Spearman's further account of the situation—the most recent of many similar ones. "The apparent greenness of the tree depends," we find, "on certain movements of quite another external thing, the ether. The matter of the external world is in a state of violent commotion. Its minute particles possess vibratory movements." * Here all the essential terms are obviously derived from the directly perceived world and then applied to the theoretical universe of physics—"movements, external thing, external world, commotion, vibration." From the purely scientific standpoint, of course, this is quite legitimate. It simplifies the physicist's problem by excluding all that is extraneous to his restricted sphere of investigation. But philosophically it is wholly illogical, simply because it then purports to be, not a restricted scientific analysis, but a complete philosophic explanation of the nature of perceptual experience.

4. Thus the scientific form of the causal theory of perception, when considered from the philosophic standpoint, breaks down completely; and the sole alternative is to

* *Ibid.*, p. 37. Abridged.

attribute the world of immediate experience to the influence of a universe which is itself unknowable and inconceivable —an existential *Ding-an-sich* and nothing other.* The suggestion only needs to be advanced to be at once recognized as impossible; it first proclaims the bankruptcy and then demands the suicide of thought. For it implies that whatever may be the degree of the complexity of the structure of the universe revealed by scientific inquiry—and this complexity will certainly be found far to transcend its present limits—we must always assume another causal but hidden universe which is absolutely different in its nature from that which we experience, because indescribable in any terms which apply to this latter, which yet is its own effect; and this applies equally to the body of the percipient; so that one of the essential principles of the theory of causation, which postulates the adequacy of the cause to its effect, is altogether violated.

This argument against any duality of the physical universe, however, must not be understood to mean that the nature of this universe will ever be completely apprehended by finite human thought. Some unsolved problems —some uncharted regions—will always remain. But it does imply that thought is engaged in no vain quest; it is not finally to be stultified, but always rather "baffled to fight better"; and its inexhaustible explorations of reality are ever progressive and supplementary, no matter how self-contradictory they may seem to be at first sight. This is, of course, no new doctrine; it is rather the basal principle equally of Platonic as of Hegelian idealism, and may be paralleled by Spinoza's infinite Divine attributes, which yet inhere in and manifest the one ultimate reality.

All these perplexities and contradictions disappear when we regard the entire series of physical and physiological processes as determining, not the actual existence nor real character of the object of perception, but simply *perception itself* as being also a process, but of a higher order than these preliminary basal processes. This sug-

* As in Kant's earlier phases, but not his later. *Cf.* p. 22 *ante*.

gestion cannot be excluded on any purely *a priori* grounds; for as I have already pointed out, the essential character of causation is itself still unsettled. The sphere of its operation cannot therefore be determined beforehand; and as we have seen, several thinkers have actually advanced the causative transformation of the material into the psychical as a basis of epistemological theory. There is here undoubtedly a perennial difficulty, for the ultimate connection between matter and mind seems one of our insoluble problems. But whatever may be the difficulties of its explanation, the fact of their connection is patent. Even though the opposition of subject to object falls itself within experience, and even if the external world could be accounted for in terms of the projection or construction of sensations themselves, there still subsists the insuppressible contrast between the extended and the non-extended, the ponderable and the imponderable, the outer world of sense-perception and the inner world of thought; and the essential point here is that we are equally distinctly aware of each of these spheres of being. Whether or not they are equally real, they certainly exist equally, while the modifications of one are uniformly paralleled (to say the least *) in the other. Perception further, as distinct from the percept, is a process, an activity, whether of a "self" or not is here immaterial; all that need be established is the actuality of the process. It is one mode of apprehending—grasping—seizing—the content of consciousness or of awareness; it is an "organ" of the mind; and as such its process of development has been fully as natural as that of the bodily organs; which means, again, that it is causally determined.

From this standpoint it becomes obviously impossible to regard perception as the result of any kind of complex of discrete "sensations", in the generally accepted meaning of this term as denoting contents or objects of experi-

* This qualification is intended to meet the current denials of uniformity and parallelism by Dr. McDougall and other psychologists. But this does not, I take it, imply the repudiation of causation, which is all that I am here concerned with.

ence, and therefore *not* a process ; * although unfortunately it is often applied to process too. But when we restrict " sensation " to a certain type of content, it follows that from such content no process—such as perception essentially is—can ever be derived ; and that we always find some content, whatever name may be applied to it, becomes clear from the recent analysis of the phenomena by Spearman. For he takes " the primary effect of the sensory stimulation to consist in something that can fairly be called a mental *state* ; it is an experience merely lived or undergone. . . . The initial *mental* effect of sensory stimulation (is) sensation in the strict meaning of a state ". As yet therefore there is no content—we find simply a " lived experience "—a " mental state ". But further, every such " lived experience " implies, without any further mediate stages, not only a content but also some kind of knower—" any lived experience tends to evoke immediately a knowing of its characters and experiencer . . . the word immediately means the absence of any mediating process ". †

Thus even in a psychological theory for which " sensation " or " sentience " denotes a state we find that this state is necessarily correlated with some content. The precise meaning here of " knowing, characters, experiencer " is immaterial. The sole essential point is that there always exist, from the earliest stages of consciousness, both process and content. From no kind of content, however, can perception—itself a process—ever be derived ; it can spring only from another process simpler than itself ; but this result simply raises afresh the whole realistic issue as to the nature of the content or object with which the processes of sensation and perception are both concerned.

5. Here it must further be noticed that nothing whatever is gained, from the epistemological standpoint, by regarding the content of sensation as being originally a purely mental entity. For even if it were so, the problem would again arise as to how we became conscious of it—by what process

* *Cf. ante*, p. 19.

† *The Nature of Intelligence*, pp. 46–48. My italics. *Cf.* further p. 54 on the " experiencer " or " underlying ego ".

it arose within experience. But this, in principle, is also the problem of perception; and neither problem is in the least degree solved by holding that the content apprehended is at any stage mental, since the *apprehension* of mental content is the same type of process as the apprehension of any other content, and equally therefore demands explanation. If *e.g.* we admit a radical distinction between organic sensed content, such as bodily feelings located in the organism, and externally located sensed contents, still it is one and the same problem as to how we become conscious of both types. It is not simplified by calling one subjective and the other objective; this is merely to repeat the old dogma that the mind can know only its own states, and then to confuse states of mind with states of the organism.

At this stage of the inquiry Realism is entitled to appeal to its theoretical self-consistency. It is of course impossible as yet to retrace the course of the actual evolution of consciousness; but it is nevertheless possible to discern the beginnings of consciousness in a person awaking, or recovering from an anæsthetic. Now the realist explanation of the phenomena has the merit of simplicity, particularly if it is considered in the light of the theory of the logical basis of realism which has been advanced in my earlier chapters. We begin with material objects—the organism and its environment. Some specific influence of the environment on the organism causes the organism to become, further, what Spearman has called the "experiencer", who is then conscious, like the observer himself, of the environment. In other words this arouses a process or activity whereby, first as sensation and then as perception, the knower becomes aware of the material world. He also becomes aware, of course, of organic feelings located in his body, together with emotional and other mental factors. But this latter phenomenon itself does not concern, and certainly cannot disprove, the realist theory; it constitutes a still further process, distinct from and additional to the perception of the external world. From this the mental factors are sharply distin-

guished by being "private"; and the realist believes that he is viewing a process which is throughout identical with what occurs in his own case. On the other hand, unless his fellows are as directly aware of the same physical world as he himself is, despite those differences between "reality" and "appearances" with which he is himself quite familiar as subsisting alike in his own experience as in theirs, and which fall within my logical explication of realism, it becomes extremely difficult, if not quite impossible, for him to understand why everyone acts and reacts in the same way; to resort to any of the alternative theories—representation, transformation, projection, "private" space-time and universes—is to complicate matters to a degree totally unnecessary when compared with the simplicity of the realistic theory I have endeavoured to establish.

Nor again does introspection prove that the objects of developed perception originate in content which itself is sensation.* Kant's "raw material of our sensuous impressions", which is "converted into a knowledge of objects which is called experience", is of course classical,† and has been retained, in one form or another, in many later systems. I have already dealt with Spearman's primary "sentience", and have shown that not only do we find therein from the outset both experiencer and content, but that the ontological nature of this content, which forms the crucial problem of realism, remains undetermined. Still more definitely Strong asserts that "you can, after looking at a fire, turn your attention to the mere sensation of light, a thing that is a state of yourself in the same way that a pain is . . . you can use these feelings as media of cognition, or you can consider them in themselves, and in the latter case . . . it is now recognized to be a state of yourself . . . such states constitute the ego".‡

* The ambiguity of 'sensation" already referred to in denoting sometimes content and sometimes process must here be borne in mind. I have endeavoured to indicate the distinction by the context.

† *Critique of Pure Reason*, Introduction.

‡ *Mind*, vol. xxxi. p. 317.

This general position is based first on the implicit belief that the essential nature of mind necessitates that it can experience, to begin with, only its own states, and secondly on a confusion between those sensations or feelings which are definitely located—and in this connection "located" means perceived—as upon or within the body, and other sensed contents which are located, equally definitely, in the outer world. There are undoubtedly cases in which it becomes difficult to distinguish these from each other; there are also the phenomena of illusion and hallucination to be considered. But all this is no sufficient reason for wholly identifying the two classes. For it is one and the same process of perception which reveals the one as internally, and the other as externally, located. Apart from or prior to perception, that is, sensed content cannot be characterized in any way, and cannot therefore be located at all. In other words sensed content, merely as such, can disclose nothing whatever about its own nature; if this is to be discerned at all it must become perceived. As sensed, it merely exists or subsists, wholly undetermined and unqualified, the primary basis of knowledge but not itself knowledge,*—that "pure Being" of the Hegelian *Logic* which is equally Nothing, although it is this latter not in itself but rather for the mind.†

Sensed content therefore can only become qualified in any way by being perceived; and perception reveals that from the outset the content of vision, and less definitely the content of hearing, are external to the eyes and ears themselves; although this situation becomes complicated by the externality of the observer's body as a whole. Still, this does not affect the principle involved here; and then further, mainly by reference to these two types of content, that of touching and of smelling also becomes externally localized. This is implied by the "voluminousness" which James ascribes to "the sensations of hearing, touch, sight and pain",‡ as also by the "extensity"

* *Cf. ante*, p. 91, on "primary sense-knowledge".
† *Cf.* Wallace, *Prolegomena*, p. 301, n. 1; pp. 324, 325.
‡ *Principles of Psychology*, vol. ii. p. 134.

which is regarded by Ward as the original qualitative basis of extension proper.*

But this discriminative process of localization by no means implies that content which is (to begin with) definitely subjective, or again that states of mind or of the self, become transformed or projected into external objects. The only valid ground for such an assertion would be that it could be introspectively discerned as actually occurring. But introspection is merely one type of perception; if we adopt the Kantian term "inner sense", we may call introspection "inner sense-perception" to distinguish it from perception of the outer world; and then I cannot myself find that introspection reveals any such process of projection or transformation whatever; the voluminousness and extensity just referred to are original. "This element," continues James, "discernible in each and every sensation, is the original sensation of space. . . . Extensity becomes an element in each sensation just as intensity is".† The subjective is thus not converted into the objective; rather the two categories develop *pari passu*, neither being prior to the other, but both being always equally valid. Conversely, when perception gradually declines with the onset of sleep or anæsthesia, its definite content is not reduced once more into pure subjectivity, but simply becomes steadily vaguer and cloudier until all its objective distinctions alike merge into unqualified presentational continuity.

This conclusion is not materially affected by the obvious fact that perception is a highly complicated process, though we have seen that Spearman regards this complexity as favouring his view that "the eventual effect of the material thing on consciousness is barred three times over from any likeness to that thing itself. . . . Percepts are far removed from the *initial* effect of sensory stimulation upon consciousness; they have behind them an eventful history".‡ But this integration of sensed contents with images and

* Article "Psychology", *Encyclopædia Britannica*, sect. 11 (eleventh edition).

† *Ibid.*, pp. 135, 136.

‡ *Nature of Intelligence*, p. 46.

ideas, whether it be automatic or voluntary, is throughout a process which systematizes and correlates subordinate mental, cerebral and sensory *activities*, each of which is concerned with its own specific element of the total content ; and here once more the argument applies that there are no *a priori* grounds for believing that the sensory processes themselves can never be directly concerned with material things. On the contrary, every theory of knowledge except pure subjectivism or solipsism admits the influence of some physical objects on physical sense-organs ; and these, according to Direct Realism, are the objects of immediate observation, never noumenal nor merely inferential.

If now we adopt Ward's ingenious suggestion of an imaginary racial individual,* it is not illogical to regard the phenomena which have just been considered in the case of an actual experient as being typical of what has occurred during the entire evolution of sense-perception. Certainly we have to face here once again the inexplicable advance from unconsciousness to consciousness—the earliest appearance of processes no longer physical but psychical ; and from the purely psychological standpoint the content of consciousness, as Ward maintains, is simply a presentational continuum, neither subjective nor objective. But the same phenomena must also be interpreted ontologically ; and then to regard the whole content of which the experient at this primary stage is conscious as being subjective is simply a gratuitous assumption which begs the entire issue, precisely as in the case of an awakened human being. In both cases alike the apprehended content is vague and indefinite ; but mere vagueness in itself is not subjectivity. On the contrary, content which is wholly subjective may also be perfectly definite ; and to assert that the primitive content of consciousness is subjective is in principle the same thing as to maintain that the visible field of a shortsighted person is objective when he looks at it through his spectacles, but that it straightway becomes partially or completely subjective the moment

* *Encyclopædia Britannica*, article " Psychology ", sect. 10 (eleventh edition).

he removes these and sees it with his unaided eyes. This contention, of course, does not imply that subjective content was absent when consciousness first appeared, any more than it is absent in the lowliest living sentient organisms. Probably part of the content is there localized, in some vague way, within the organism itself; but that does not affect the main issue; and all that it is essential for Direct Realism to maintain is that other elements of the primal presentational continuum—the dimly discerned qualities of the environment—are from the first ontologically objective.

CHAPTER XIV

THE TWO PHASES OF DR. BROAD'S REALISM

1. As thus presented, Direct Realism is capable of combining those two aspects of the theory of perception which Broad has designated the " instrumental " and the " causal ". " The instrumental (theory) holds that our organs are the instruments by which the mind perceives real things and their real qualities "—which is the standpoint of Direct Realism. From this, however, the causal theory is distinguished as implying " that our organs are conditions of the perception by the mind of objects and distinctions in them, both of which for aught we can tell are mere appearances ".* But this sharp distinction, which connects the instrumental view of perception with the apprehension of " reality " and the causal with that of mere " appearances ", is altogether unnecessary. For perception, as a process, is at once causal *and* instrumental—it falls into its due place within the entire physico-psychical causal series, while the actual effect of this series is the direct perception of physical reality. There is nothing here illogical or contradictory. For in any case there is *some* process of apprehension directed towards *some* object of consciousness; and whether this object is " reality " or " appearance " cannot depend on the causal, or instrumental, character of the perceptive activity unless we begin by assuming that all direct apprehension of physical reality is, as such, exempt from causal determination; a quite impossible assumption, as, indeed, is fully admitted by Broad himself.†

* *Perception, Physics and Reality*, p. 197.
† *Ibid.*, pp. x, xi.

The conclusions which he draws from his treatment of the causal aspects of perception furnish a sufficiently clear summary of his entire position. We find then in the first place " that in all probability, the objects of our perceptions do not exist when they are not perceived, although there is no absolutely conclusive proof of this ". This negative standpoint, however, is further qualified by the assertion that " there is some reason for believing and no reason for disbelieving that there exist real counterparts to the figures which all people agree in perceiving by touch ".* On these grounds therefore I feel justified in dealing with the general course of his argument on its merits, with only incidental reference to the purely causal features of perception ; and then his consideration of the subject is seriously weakened by his omission to consider the principle that appearances are manifestations of partial reality.† In other words, the fact that the conditions of experience of themselves determine that we generally apprehend degrees of reality is altogether ignored ; and the inevitable result is that, ontologically, appearances and realities become almost absolutely severed from each other from the very outset of his analysis. This becomes quite obvious when we find that Broad begins by *defining* the term " object "—quite legitimately as his own definition—" to cover anything that actually is sometimes immediately perceived, whether it exists when we cease to perceive it or not ". But " objects ", as thus defined, are at once divided into two distinct types—into " appearances, which only exist when they are perceived, and realities, which exist unchanged whether perceived or not " ; ‡ and thus the logical possibility that appearances may be parts of realities, and may therefore share their unperceived existence, is at once excluded by definition. But obviously this method of considering the problem absolutely surrenders the realistic position, whether as unreflective or as philosophic, in advance ; for no arguments whatever can now be adduced—no defence of any kind be raised—against the conclusion that all appearances without

* *Perception, Physics and Reality*, pp. xi, 275.
† *Cf.* however further below, p. 175. ‡ *Ibid.*, p. 8.

any exception lack existential reality; and the whole issue is thus prejudged by Broad's initial definition of appearances as contents of perception "which only exist when they are perceived"; whence it necessarily follows that "appearances are not realities".*

We find in the next place that the perception of appearance, and the perception of reality, are regarded as effects that are almost totally different in their nature; a result plainly in complete accord with what precedes. For "when we perceive reality . . . the effect is to *establish a relation* between the mind and the reality that we perceive"—the effect here, in short, is "instrumental"; but when on the other hand we perceive appearance the effect includes the production of a *newly existent entity*—that is of the appearance itself as constituting one type of object, so that we now have "a whole of object + relation to mind"; and—obviously—"two effects could hardly be more unlike than this". But there still remains a difficulty; for after all "there is an immense likeness between (these two effects). The perceived object in both cases is very much the same. The ellipses that are only *produced as elements* in the whole called a perception are extremely like the circle which is believed to be able *to exist out of* the perception"; † so that the instrumental theory seems to be faced with an irresoluble contradiction.

This outline of Broad's general position enables us to see that the solution of this difficulty is perfectly simple, and has indeed already been suggested.‡ For in his own instance of the various shapes of a coin all the ellipses (including the straight line when seen from the side as a limiting case) are obviously parts of the "real" circular area, which alters in such a way that these ellipses are always smaller than itself, while the ellipses themselves, on the contrary, frequently change into the larger and all-inclusive circle; this is clear both geometrically, and in the application of geometry to optical laws. The "appearance" therefore

* *Ibid.*, p. 73.
† *Ibid.*, pp. 239, 240. *Cf.* further p. 175 below; my italics.
‡ *Cf. ante*, p. 83 and note †.

is here always part of the reality, so that there can occur no actual production whatever of a wholly new entity ; on the contrary the real circle always exists, only, under certain physical conditions, less of its area must become manifest, so that it is then apprehended as partial reality *—*i.e.* as an ellipse. It is clear therefore that there are never two effects which are almost absolutely different from one another, as Broad suggests ; there are rather two effects that are very closely similar, as is evidenced by the ever closer approximations of the larger ellipses to the circle ; and this again is readily intelligible, since all the parts of any entity must more or less resemble that entity.

2. But still further, this resemblance implies something much more important than itself. For it constitutes the basis of that significance—reference—meaning—which always attaches to appearances, and apart from which, indeed, developed perception would be impossible.

Thus appearances not only resemble the correlative reality—they also symbolize or mean that reality ; so that while it is the appearance that is sensed, it is nevertheless the reality that is perceived ; † whereas if, on the other hand, reality is never perceived (as is suggested by Broad) ‡ then the very basis of all significance—and therefore of all mature perception—at once vanishes ; we are again committed to noumenalism, as in the case of Stout and the Critical Realists. Thus the " instrumental " theory, as here presented, acquires a double aspect or basis. For in being instrumental, it is at the same time causal—that is its *scientific* aspect ; while with this, in the second place, it combines the *epistemological* character of inherent significance.

Turning to another phase of Broad's theory, we find that exactly the same argument applies to his consideration of error. " Appearances," he points out, " are not perceptions of nothing, but have an object just as much as do those

* But not therefore as partially real.

† *Cf.* detailed instances, p. 33 *ante*. It must be remembered, however, that in certain cases the real can be both perceived and sensed. *Cf.* p. 175.

‡ " When we perceive reality, *if we ever do so* " (*op. cit.*, p. 239 ; my italics).

which are supposed to be perceptions of the real. . . .* But if perception just means that mind and object are brought into the relation of perception to each other, this seems to imply that both are existing beforehand ready to be brought into that relation. And this cannot be so with apparent objects" † simply, however, because these have previously been *defined* ‡ as non-existent when unperceived. But again the truth that appearance is partial reality enables us to refute this argument, since appearances then not only resemble the reality, but, as its contained parts, are also necessarily coexistent with it.

The entire situation may now be elucidated by applying Broad's own assertion that "it does not make against (the instrumental) theory if the use of the instrument does not tell you the whole truth about the real; the troubles arise when it gives you a perception with an object that is believed to be an appearance". § But these "troubles" are due entirely to the ontological character of appearances having already been determined in advance by Broad's original definition of them as existent only while perceived, which begs the very question at issue. Certainly it is in one sense true that the instrumental theory of perception, which I have myself advocated, rarely reveals "the whole truth about the real"; for it is only on exceptional, but nonetheless crucial, occasions, that the conditions of perception permit our apprehension of the fully real attributes of a physical object.‖ On the other hand it always remains possible that appearances, in virtue of their inherent significance, should mean that complete reality of which they themselves are parts; and from this point of view, although our apprehension is not so direct as it might be, still we do in the true sense of the words perceive "the whole truth about the real", so far at least as our unaided sense-organs are concerned; for supplementary knowledge by means of scientific instruments of observation still remains available.

* "Supposed to be"—*cf.* previous note.
† *Loc. cit.*, pp. 203, 204.
‡ *Ante*, p. 171.
§ *Op. cit.*, p. 256.
‖ *Cf.* here *ante*, pp. 24, 57, 85; and for Broad's later standpoint, below, p. 175.

Finally, from his own special standpoint, Broad attributes too high an epistemological value to the deliverances of the sense of touch. I do not myself, of course, desire to minimize their significance in any degree, for that would be contrary to the whole trend of my arguments for Direct Realism; and Broad's own conclusion on this particular point appears indeed to support Direct Realism. "We are thus justified," he maintains, "in talking about geometrical relations, shapes and distances as existing even when we do not perceive them, it being understood that we mean the real counterpart to which there would correspond a tactually perceived figure with the geometrical qualities in question if we did have such a perception." * Here again we find a "real counterpart" suggested, with all those difficulties of causal perceptual process and representation which have already been sufficiently discussed. But there is also another important principle involved here; for all the arguments for accepting the content of tactual perception as being truly indicative of physically real qualities are equally applicable to some portion of the content of visual perception, small though that portion itself may be. It is impossible to argue that vision is untrustworthy simply because it most frequently reveals nothing more than patent appearances; for it is only the conditions which govern tactile perception, and not the possible character of reality in itself, that prevent the same proportion between appearances and reality from arising in that sphere just as it does in vision. The sense of touch operates only when contact occurs between the visible organ and the visible object †—"action at a distance" is, for touch, impossible. But it is not therefore inconceivable; and if tangible qualities varied with distance as visible qualities do, then we might constantly *feel* appearances, and precisely the same difficulties would arise for touch as now attend vision; just as, conversely, if we saw only when our eyes were at one constant fixed distance from the object, then much

* *Op. cit.*, p. 275.

† I am speaking of complete normal experience, which is obviously seriously limited by blindness.

visible content would cease to rank as appearance and would be accepted as either reality or a counterpart of reality. Thus interpreted then, Broad's arguments here seem to me indirectly to confirm the theory of Direct Realism.

3. Broad's later treatment of the problem * is difficult to harmonize with his earlier volume; the discrepancies which I shall note do not, however, modify materially his general point of view, and it will be sufficient to select the main features of contrast. In the first place nothing is said about his initial distinction between "appearances, which only exist when they are perceived, and realities"; † all that we have in this connection is that "appearances are a peculiar kind of objects".‡ My previous remarks on this point may therefore be merely referred to here. Secondly there arises the parallel contrast between sensa and physical objects: "sensa cannot in general be identified with the physical objects of which they are the appearances".§ But while this principle, in accordance with my own standpoint as hitherto developed, is undoubtedly true in the main, it is, as it stands, altogether too vague and indefinite. It is true, that is to say, if it refers to an absolute, complete and unvarying identification of sensa with physical reals; but such an identification is manifestly impossible, as is at once implied by my earlier contention that appearances are merely parts of reality. The issue turns on the application of the words "in general"; and here we find further qualifications which are of vital importance. For on certain occasions the properties of the sensum are *the same* as the properties which the physical object appears to have, so that "when I look straight down on a penny, both the physical object and the visual appearance are round".‖ But this is by no means an isolated instance; and it is upon these crucial cases of absolute identity that Direct Realism is ultimately based.¶ It is true that the limitations

* *Scientific Thought*, Part II.
† *Ante*, p. 170.
‡ *Scientific Thought*, p. 239.
§ P. 240.
‖ P. 244. "In the case of two-dimensional (objects) there are positions from which the true shape can be seen" (*Perception, Physics and Reality*, p. 234); *cf.* also pp. 238, 239, and *ante*, p. 170. Contrast Stout's more extreme position, *ante*, p. 61.
¶ *Cf.* p. 24 *ante*.

of our perceptual faculties restrict these phenomena within extremely narrow limits; but they are nevertheless amply sufficient to constitute a sound logical argument for Direct Realism, in precisely the same way that—methodologically—the latest phases of modern chemical and physical theories rest upon phenomena of the utmost minuteness and delicacy. They appear to me, however, to have received altogether insufficient consideration in Broad's lengthy analysis of the whole problem.

And the results of this omission are intensified by the divergencies in his treatment of our consciousness of sensed content and of physical reals respectively. In *Perception, Physics and Reality* both appearances and realities are alike perceived; * while in *Scientific Thought* our conscious processes become sharply distinguished into "acts of sensing, whose objects are of course sensa, and acts of perceiving, whose objects are supposed to be bits of matter and their sensible qualities"; † or, in other words, are physical reals. Such a distinction is totally inadmissible except on the ground of the *prior* establishment of the absolute difference between sensa and material objects. Certainly if such a difference is once accepted, it may then be employed as the criterion between sensing and perceiving exactly as Broad has employed it in the passage quoted above. But apart from this consideration, and regarded from the purely psychological and epistemological standpoints, the cognition of both sensa and physical things is perceptual; this is, indeed, Broad's own original position in his earlier volume, so that his later contrast becomes a mere distinction without a difference which is introduced simply in the interests of his general theory. For that pure sensing (if it ever occurs) can have no specifically cognitive function is a truism; whatever therefore be the nature of the first *objects* of cognition, the *process* itself is always perceptual; and with this principle my own usage of the term "sensed content" is explicitly consistent.‡

* P. 8: "Appearances . . . are perceived, and realities . . . whether perceived or not."

† P. 248. *Cf.* p. 268; also with reference to Stout, p. 88 *ante*.

‡ *Ante*, p. 18.

Equally questionable is Broad's account of the conditions of our cognition of material objects ; " we pass automatically," he affirms, " from the sensum and its properties to judgments about the physical object and its properties ".* Now obviously the word " automatically " is altogether valueless here as a principle of explanation ; it simply raises a further question of intense difficulty ; for what, precisely, is the nature of this " automatic " cognitive process ? To describe any advance whatever as automatic at once implies that it occurs according to some law which our theory should disclose ; and to rest content with merely calling it automatic is to evade an obvious problem. Broad's automatism here, in fact, is simply a further variant of the position of Reid and the Critical Realists : † " the belief that our sensa are appearances of something more permanent and complex than themselves seems to be primitive, and to arise inevitably in us with the sensing of the sensa. It is not reached by inference, and could not logically be justified by inference." ‡

But the epistemological fallacies of such a position are patent. For no belief, taken purely as such, can be primitive, since every belief must rest upon either perception or direct knowledge of some kind or another. The precise relations between these different modes of consciousness pertain to epistemology. Here it must be sufficient to say that belief is a natural and inevitable expansion of the perceptual and cognitive attitudes ; it is neither opposed to these in standpoint nor foreign to them in its nature, but rather essentially continuous with them. It is true, of course, that the content of some specific belief often conflicts with something known ; but this must not be taken to imply any radical distinction between the two types of awareness. Belief simply carries the mind onwards beyond the boundary of the known or perceived by formulating, more or less definitely, what seem to be their consequences or implications ; and neither its emotional nor its practical accompaniments constitute any exclusive differentia between itself and knowledge or

* *Scientific Thought*, p. 247. † *Cf. ante*, p. 124.

‡ P. 268. *Cf.* with this " primitive, inevitable belief " Hume's "natural instinct or prepossession to repose faith in the senses " (*Inquiry*, xii. 1) ; also the Critical Realist theory of belief, *ante*, p. 124.

perception, since it is obvious that both these activities are likewise inseparably connected with feeling and conduct. As I have already observed in another connection, the essential characteristic of knowledge is certainty, and this is also true, in its own way, of perception. But conclusions that are certain imply consequences that appear probable; when therefore the basis is sufficiently firm, the evidence sufficiently weighty, these implications are accepted as the content of belief; and as the limits of certainty are constantly widening it follows that the boundary between itself and probability is never rigid but rather incessantly fluctuating; thus belief, as in the verification of theory, steadily passes over into knowledge, while at the same time this widened basis of certainty becomes the support of a more consistent system of beliefs. This reaction between the two attitudes of mind never ceases; it begins with the earliest phases of life in childish fancy, and continues until it generates the content of religion or philosophy. It makes no difference in principle therefore whether the subject-matter be simple or complex; at every stage alike belief always supplements and transcends knowledge or perception. It is altogether impossible therefore that mere "sensing" should inevitably create the belief that sensa themselves are in any way appearances; for any such conclusion some kind of ratiocination is indispensable, whether it be inference or not; and if this is so, then we are at once faced by the alternatives which attend Stout's theory. For if, in the first place, sensa can be correlated in any way whatever with physical objects (as Broad affirms) * then both the relata must be cognized directly; † and if (as he admits) their properties are in many instances the same, then such objects may be perceived just as sensed contents are; the distinction between "sensing" and "perceiving" thus vanishes, because there is no theoretical advantage whatever in maintaining it. On the other hand, if material objects can never be cognized directly—which means in effect can never be perceived—then they become noumena.

* "Generally there is only a correlation between the two" (p. 244).
† *Cf.* Sergeant's objection to Locke, *ante*, p. 126.

But the root defect of all such theories lies still deeper. It arises from the " epistemologist's fallacy " already referred to in an earlier chapter.* The plain man makes no distinction between sensa, as sensa, and physical objects as objects ; his " appearance " and his " reality " are both alike real, and differ only in their degree of fullness and completeness. There is therefore no " primitive belief " of any kind. There is a direct cognition of existents which become characterized as physical at the same time that they become distinguished into appearances and realities. These, again, are all directly perceived, and their intricate correlations ascertained by various types of ratiocination which finally become so stereotyped that they occur invariably and almost instantaneously—or, to employ here Broad's term, " automatically "—to such a degree indeed as to have been repeatedly mistaken in the history of thought for processes of purely mechanical " association ". They are on the contrary thoroughly ratiocinative or logical, no matter how crude their character or even, in many cases, how mistaken their conclusions may be ; but as I have already endeavoured in my opening chapters to trace the course of these psychic activities I need here add no further details.

* P. 75 *ante.*

CHAPTER XV

THE NATURE OF THE IMAGE

1. The question of the ontological nature of images is obviously closely associated with that concerning sensed content. For if the latter is regarded as subjective or mental, then the difference between it and images is simply one of degree, not of nature or kind. In this respect too the problem once more arises as to the instrumental, or the causal, character of perception. If it is wholly causal,* the image at least may be regarded as a product or effect of the psycho-physiological process; and from the purely psychological standpoint, which may ignore the problems of knowledge, our difficulties certainly seem to be diminished if we describe sensed content as sensational, since it then becomes a fairly simple matter to relate sensation to image both as regards the production of the latter and its resemblance to the original sensation. On the other hand, if sensed content is physical or material we must consider how the consciousness of images can best be explained by the instrumental theory, and further, the manner in which a purely mental content can resemble a purely material entity, especially when the spatiality of the latter is reproduced in the spatial characters of the image itself.

It is, unfortunately, impossible here to appeal to any general verdict founded on direct observation. For Hume's principle that "impressions" and "ideas" differ not in their natures, but only in degree,† has recently been adopted by Russell.‡ Against this view Ward holds that "images

* That is to the exclusion of the instrumental theory. I have argued that both views may be united.

† *Treatise*, Book I, Part I, sect. 1.

‡ "The stuff of mental life, as opposed to its relations and structure, consists wholly of sensations and images. . . . In themselves (sensations and images) do not differ profoundly" (*Analysis of Mind*, p. 110). For "sensations" *cf.* Chapter X *ante*.

as a whole are distinct from the presentation continuum, and cannot be spoken of as revived or reproduced impressions",* while Alexander goes still further in opposition to Hume, and for him the image has "physical existence independent of the mind".†

My own opinion on this debatable point is that the intermediate position advocated by Ward and Stout is the most true to all the facts. The difference between images and sensed content, that is, is essentially a difference in nature, not merely in degree; the former are psychical, mental, subjective, internal; the latter physical, material, objective, external; and to those characteristics of images which have been stated by Ward in support of his view—their lack of steadiness—fixity—definiteness and intensity—I would add the ease with which images may be voluntarily dissociated and held apart from each other, so that visual, tactual and auditory images may be apprehended as existing independently of each other, as compared with that indissoluble unity of the sensed properties of any given object in virtue of which it *is* an object.‡ This dissociation is most obvious, of course, in persons who partially or completely lack some particular type of imagery—visual or other. Images, further, form an integral part of one's own life and experience in a manner which is wholly foreign to sensed content. With regard to the latter we are, originally, in a state of almost helpless dependence. What happens depends, not primarily on us, but on conditions that are almost absolutely independent of us, and which we can control only in an indirect and secondary way by first observing and obeying these independent conditions themselves. Images, on the other hand, are to a large extent within our volitional control; we carry them with us, create and destroy them, so that they form part of our private world to such a degree that it is never suggested that anyone but ourself can directly experience

* *Encyclopædia Britannica*, article "Psychology", sect. 21 (eleventh edition). *Cf.* Stout, *Manual of Psychology*, p. 537: "At bottom the difference is a difference of kind, not merely of degree. Images do not strike the mind in the same way as actual sensations."

† *Space, Time, and Deity*, vol. i. p. 24. ‡ *Cf. ante*, p. 82

them. Finally, we must consider the process of transition or development which incessantly goes on from concrete images to abstract ideas or pure concepts; the latter, however, are undeniably mental or subjective,* which again supports the view that images themselves are subjective too. The cumulative weight of all these facts appears to amount to conclusive proof of the fundamentally different ontological status of sensed content and of images.

At the same time it must be recognized that the attitude adopted here is largely the result of our definitions. When therefore Alexander *defines* mind as essentially an activity or process of " enjoyment " it logically follows that images, being content that is " contemplated ", must also be non-mental, simply because they are never part of the mental process; but whether they are also physical must still remain undecided. This distinction however between mental " enjoyment " and non-mental " contemplated " content, despite its great value, seems to be too rigid. Is it not possible to regard mind, while undoubtedly a process, as at the same time including within itself certain results or products of its own activity which are themselves also mental? There are suggestive analogies here; the living organism is characterized not only by vital processes, but equally by bodily organs and secretions which are at once the results and the mechanisms of those processes, and are therefore themselves vital in the literal sense of this term, to such a degree indeed that the heart may be isolated in saline solution and still continue to beat; so that just as this organ itself is living, so the image may itself be mental. Similarly, there is the artistic experience —activity—process—which again creates products that are also artistic; and thus we have an activity and a content, or group of objects, to both of which the word " artistic " may be applied without any ambiguity. And finally, every personality is constituted by complex activities of very various types, but equally by permanent qualities

* It must be remembered that we are considering here the *ontological* nature of conceptual content. Some neo-realists maintain the objectivity of concepts; on this point *cf.* below, Chapter XX sect. 3.

and attributes which are as fully personal as are those activities. May we not then conceive of mind, not only as mental process, but also as including contents which are mental, in the form of images and ideas ?

2. The resemblance between images and sensed content then arises from the very conditions of experience itself. According to the instrumental theory, perception is the result of the interaction between the physical thing and the organism. But the physiological effect of the external physical stimulus often persists as a modified activity of sense-organ and nerves after the stimulus itself has ceased, the final result being usually described as the production of the after-image. It would be more accurate to regard this result as the *consciousness* of the after-image. This is wholly in accord with the instrumental theory, which implies that the activity of the higher cerebral organization always results in some form of experience, in its dual aspect of process and content.* The residual or inertial process which follows the original perceptual activity must itself therefore be related to its own specific content. Further, since the entire cerebral process is throughout continuous,† it is natural that the respective contents should present the degree of continuity and similarity manifested in the resemblance of after-image to object ; ‡ and this consideration obviously applies to the image proper, although it still leaves open the ontological nature of images as a whole.

Our answer to this question then depends on the criteria of existential status which are forced upon philosophic thought by the whole of experience ; and here that contrast between all the characters of the totality of perceived

* I assume here the laws of the threshold *etc.* ; the details are irrelevant ; nor do I think my view contradicts McDougall's statement that " meaning has no immediate physical correlate in the brain that could serve as its substitute and discharge its functions " (*Body and Mind*, p. 311). I suppose the emphasis here falls on " immediate ".

† " There does not exist one single sensory character but that the sensorium can evoke it in consciousness without any assistance at all from the sensory receptors, or even from the sensory nerves " (Spearman, *The Nature of Intelligence*, p. 42).

‡ " Object " means physical object, except when otherwise indicated. Some degree of similarity characterizes even the negative after-image.

content and all the characters of images is so fundamental that it compels us to adopt the two exclusive categories of physical and psychical. It must be remembered that these arise *pari passu* within experience; they are not presupposed, that is, in the interests of epistemological theory. Philosophy merely accepts them as the results of early reflection and endeavours to systematize them so as to discover their profounder meaning; and, for Direct Realism, they logically imply an existential contrast which is ultimate.

My position here differs materially from Alexander's; for he regards the image as being physical. His view involves however a double confusion—first between the physical and the non-mental, and further between the psychic character, and the logical function, of images and ideas. I have already admitted that if we *define* mind as process or activity, then all content at once becomes non-mental; but we cannot therefore identify the non-mental with the physical. The latter must still exhibit the attributes of extension, resistance and ponderability,* as these are given originally in sense-experience—attributes obviously absent from all images and ideas; for while we may have an image of resistance or an idea of weight, the image itself is not resistant, nor the idea itself heavy. We have here again that radical distinction between the psychic *nature* of imaginal content and its logical *function*, which I have previously insisted upon in connection with our original experience of existents and existence.† I there argued that "the direct consciousness of existents precedes the consciousness of images *as* images", and that the result is that when the *explicit* consciousness of images develops, these are at once apprehended as faint and transient when compared with vivid sensed content, and are therefore described as psychic—subjective—mental.‡ When therefore Alexander asserts that "*primâ facie* (sensed contents) and images are on the same footing",

* But I am not insisting here on any absolute distinction between this and sensible resistance.

† *Ante*, p. 43.

‡ *Cf.* p. 188 below on Hume.

he is guilty of the psychologist's fallacy of reading into the experience of the plain man a theoretical interpretation of the facts which that experience never contains. It is true that for the psychologist, in certain restricted aspects, images and sensed contents may be " on the same footing " ; but if my account of the earliest phases of sense-perception is correct they fall from the outset into widely different categories for the " innocent original ". The one is adjudged " real " and the other " unreal " by the plain man principally because they seem to him to carry these valuations on their faces. It is equally true that this primary judgment is supported by the " experience of reducing them to coherence which betrays their inadequacies, most obvious and ubiquitous in the case of images " ; * but this experience is not the sole basis of the distinction made between them, as Alexander maintains.

The same fallacy affects his earlier account of perception. " I have seen and felt and smelt an orange at one and the same time. Later I see the orange, and its feel and fragrance are ideal. What was before a sensum has become ideatum, and what was before ideatum is now a sensum." † This of course is true. But it is very far from implying that the sensa and images (or ideas) which are present are ontologically or psychologically " on the same footing ". Alexander has here quite obviously confused the idea with the ideatum—the significant psychic content with the signified physical existent. For to be logically ideal is much more than to be psychic idea ; nor is the ideatum ever the idea ; it is simply the physical existent which was originally directly sensed, but which is now indirectly apprehended by means of the logical function of its representative psychical idea. Certainly if we adopt Alexander's express *definition* of mind in advance as always an activity, then " ideata and sensa declare themselves equally non-mental existences " ‡ simply in virtue of that definition. But this in itself does not prove that *ideas* are physical entities. They are rather significant or representative of

* *Space, Time, and Deity*, vol. ii. p. 219.
† *Ibid.*, p. 86. ‡ *Ibid.*

objective ideata, but are themselves in their own inherent character psychical and subjective; Alexander, however, has omitted to distinguish between ideatum and idea.

3. To be logically consistent this view of the nature of images should be equally applicable to time and space. I believe that it is, and that insuperable difficulties attend the opposed theory that "all images of external objects are themselves spatial in character," if this means that their spatiality is existentially and ontologically one with real perceived space. Alexander's standpoint here is obviously complicated by his metaphysics of Space-time; but apart from this, if an image of space is itself spatial then an image of weight must itself be heavy and an image of white itself coloured, in the sense that one would depress an actual scalepan and the other affect a camera plate. Certainly "imaged Space is but perceived Space as it appears in an imaged form"; * but this "imaged form" is, ontologically, altogether different from perceived space, just as imaged colour is ontologically different from perceived colour; an image of colour, in short, is not a coloured image. I have just suggested that Alexander erroneously identifies idea with ideatum; this is also the case with image and ideatum—"the image or ideatum belongs somewhere in the world of Space-Time".† The ideatum —the real entity signified in the act of imagining—undoubtedly exists in the perceived world; but this does not necessarily imply that the image, which signifies the ideatum, is also in that world; throughout his discussion of this problem, however, Alexander ignores the vital distinction between the ideatum on the one hand, and the image or idea on the other.

The results of this in the case of time are still more serious. Once again it is true that "the memory-object is the physical man cutting physical trees yesterday". But nonetheless there are present during the act of remembering, certain images and ideas which are never

* *Ibid.*, vol. i. p. 99. I retain Alexander's initial capitals without any reference to his metaphysical position, which is not directly relevant here.

† *Ibid.*, vol. ii. p. 83.

themselves physical, but psychical, and which cannot themselves be past, but are always present. "The pastness of the object" continues Alexander, "is a datum of experience, directly apprehended".* But this directness is of a secondary order, not primary; it varies both with the level of intellectual attainment and with the conditions of the specific case, and is always the outcome of some such complex process of development as is outlined by Ward in his *Encyclopædia Britannica* article. In slowly moving minds, and in all minds whenever some past event can be recalled only with difficulty, the presence of this image content which mediates remembrance is easily realized, although it is reduced to an indiscernible minimum in alert minds and in every "flash" of memory; or alternatively, what was originally imagery becomes transformed into pure ideas—into *e.g.* an ideal time schema. But this time schema itself is not "past" any more than the geometrical schema of a mathematician is itself spatial; both alike are entities wholly subjective and psychical.

The only alternative is the complete abandonment of any real distinction between subjective and objective; a course which has indeed been already adopted, implicitly or explicitly, in the philosophy of "pure experience" and the psychology of behaviourism, where the treatment of all problems alike becomes merely descriptive rather than explanatory. The existential significance of these terms, that is, disappears, even though there still remains some form of objectivity for thought. For the content of experience becomes in principle the same throughout its whole extent, in spite of its *primâ facie* differences. It is all subjective, or all objective, just as we please,—and generally, as the history of thought shows, it finally becomes subjective; the logical result being that reflection gives way to observation, explanation to description, while causation is reduced to invariable sequence or to inseparable connection and nothing more. Reality thus contains no permanent

* *Space, Time, and Deity*, vol. i. pp. 115, 113. *Cf.* Bosanquet, *Nature of Mind*, p. 51: "The real objects and events remain as immediately what we think of . . . as anything which we touch or see."

elements and has no substantial basis, unless these exist in some noumenal Limbo altogether out of the range of human experience; while experience itself becomes quite inexplicable. For even if we explain the appearance of images as somehow due to sensed content, this itself is likewise subjective—is a mere succession of elements all equally transient; it is meaningless, again, to say that they arise from nervous processes, for nerves themselves are sensible and therefore (once more) subjective.

4. From these general considerations I turn to a few points of detail which may serve to elucidate them a little further. The close resemblance between the earliest formed images and the correlated sensed content is sometimes expressed by saying that the characters of the image are sensible characters. If we speak with due precision this is quite inaccurate. It was, of course, these characters to which Hume referred when he described the image as lacking in intensity or vividness and therefore not an impression; they make the image such as it is, and are themselves therefore not sensible, though they resemble elements which were previously sensed. This is true even of imaged space and time; neither of these is "real" in the sense of being external or independently objective, though they are of course real as image elements; so that by recalling remote historical events we may image a millennium in a "real" minute.*

If we revert in this connection to Ward's psychical racial individual, already cited in the chapter on Causation, we may regard images as being factors of a quite unique character within his experience, whose development is brought about by the evolution of nervous structures. It is true that we cannot exhaustively explain this phase of the advance from physical to psychical, any more than we can explain the first appearance of consciousness itself as a process of apprehension. On the other hand we cannot argue that there is any *a priori* impossibility either that images should thus arise, or that they should resemble

* Allied with this are the distortion of time in dreams, and spatial hallucinations due to various drugs.

sensed content ; we simply do not know enough about the ultimate structure of reality either to say why this should have occurred, or to rule it out as being *a priori* inconceivable ; we can but take the facts as we find them and attempt to systematize them.

Accepting then the phenomena as they come before observation, there is no difficulty in tracing the transition from the primary resemblance between images and sensed content to the representative and significant status which these rapidly acquire—a function which may be fulfilled either involuntarily, in accord with the " laws of association ", or voluntarily, and then more strictly logically ; the principle involved is the same throughout. But it is important to notice that the image *remains* an image—that is, it is *always* representative or significant—whether it automatically supplements the sensed contents in perception, or is deliberately employed in the refined symbolism of the most abstract thought. This principle involves the fundamentally important distinction, already alluded to, between the psychological and the epistemological aspects of imagery, or between its existential and its logical status. Existentially, that is, the image remains a subjective factor of the individual percipient's mind, and is as such wholly private to himself ; but logically it is connected—or, perhaps more truly, it connects itself—with the objective world, common to all percipients. I think this cannot be better expressed than in Bosanquet's logical theory. " No mental states in a human consciousness," we find, " are mere mental states, but all contain matter that has been and may be significant . . . there is, in the main, no storehouse of mere unapplied psychical material, nothing psychical which is not stamped and figured within its own sensuous being by divisions, relations, intensities, all relative to its meaning as signifying some object of thought." * This principle has a direct bearing on my theory of perception, since it sharply distinguishes between the existential status of the sensed content and of the image content respectively, while at the same time it determines that our

* *Logic*, vol. ii. pp. 295, 296.

perceptual apprehension is always * of the physical universe, since it is this universe which is indicated or signified by the imagery in virtue of its inherent representativeness.†

As I have argued throughout, therefore, only the content actually sensed at any given moment is existentially identical with the physical object itself, and our apprehension of this, once more, is supplemented and expanded by the significant imagery which automatically attaches itself to it ; this latter, however, is never an actual part of the object, although the fact that its logical function always overshadows its existential status (as Bosanquet has shown) results in our involuntary identification of the two. This however is but one of the many instances where the interest of the ordinary observer in the practical issues of life makes him oblivious to the real character of his mental activities.

The further development of Bosanquet's position, however, fails to provide a satisfactory criterion between psychical and physical existents ; he regards these characters as being distinctive, not of two types of content essentially different, but rather of two different aspects of one and the same content. " The nature of external objects is continuous with that of the stuff of mind, and is physical, *i.e.* has variations relative to those of other objects, as well as psychical ".‡ But this distinction hardly serves its purpose ; for psychical content itself has " variations relative to those of other objects ", including here physical objects ; firing a gun, besides its physical consequences, has also many psychical results. Hence " having variations relative to those of other objects " is equally characteristic of both types, and therefore an insufficient basis of distinction. On the other hand, if we substitute " variations relative to those of other physical objects ", then the term to be defined is itself employed in our definition, so that this extremely valuable consideration of the ideational functions

* Apart of course from illusion and hallucination ; but these have been sufficiently considered in what precedes.

† But an inherence acquired in the course of evolution.

‡ *Logic*, vol. ii. p. 309. This recalls, in form, Russell's dual-aspect theory of sensations. *Cf. ante*, Chapter X.

of mental states provides no irrefragable criterion between material and psychical existents.

Here however another minor qualification becomes necessary. For in certain extreme cases there can be no doubt that the content originally sensed—and therefore itself physically real—becomes indistinguishably merged with the positive after-image which it itself produces ; the vivid after-image of the setting sun is perhaps the best example of this phenomenon, but it is easily possible that it always occurs in some infinitesimal degree, so that the perceived content may then be said to be a combination of physical with psychical. Still this constitutes no serious difficulty so far as Direct Realism is concerned ; it is analogous to that minute interval of time which always elapses before an object is fully perceived, and to that extent it must be admitted to condition our perception of the physically real *as* real. To be pedantically accurate, what we perceive is to that infinitesimal degree appearance—it falls short, again infinitesimally, of being complete physical reality.* But so long as it remains possible to distinguish clearly between the originally sensed content and the after-image there is nothing to prevent us regarding the former as physically real ; just as we may accept the visible moon, despite the time required for its light to reach us, as physically real. There is certainly no ground here for looking upon sensed content as itself psychical, simply because it is combined with a modicum of psychic content ; all that is actually implied is an element of difference or displacement between the real and the perceived so slight as to be practically always negligible ; appearance, as partial, here falls short of the complete reality by an imperceptible degree.

5. I conclude then that from the epistemological standpoint, as distinguished from the purely psychological, images and ideas exhibit a threefold character which may be distinguished as subjective mental content, logical

* That is, of course, so far as its sensible qualities go. These must again be supplemented by its imperceptible characters—its molecular constitution, *etc.*

significance and objective real existence. The mental content is the actual element within the observer's own private experience; as such it is itself—in its own way—real, even though it is often discernible only by laborious introspection. Logical significance is the function of this content—the part it plays within the entire process of knowledge; and objective real existence is—in principle—the significate to which the mental content refers and with which it keeps the experient in continuous contact. In perception this contact is as direct and immediate as the conditions of human experience permit it to be; for the reality is here the physical—material—universe insofar, again, as the conditions of any given experience permit its apprehension. Perception itself, however, shares in the degrees of development which characterize all knowledge; it manifests therefore an enormous range, from the mere sentience of the simplest animals to Wordsworth's contemplation of Tintern Abbey or Keats's Vision of a Grecian Urn; and the main factors in this advance are the evolution of the sense-organs and nervous structure on the material side, and of image and ideal content on the mental. Whether, when the place of perception is taken by conception, the contact of the mind with reality becomes more immediate, or less, is to some degree a question of our definition of the word "immediate", and had better therefore be deferred at this stage of our inquiry.

It is then in this setting—in the light of the continuous transition from the immediacy of perception, by way of the mediacy of imagery and ideas, to the higher immediacy of pure thought—that the nature and function of images call for consideration in any realistic theory of knowledge. Imagery thus forms that indispensable intermediate stage which enables mind to rise above the animal level and so to advance, it may be, to the divine intellectual self-contemplation of Aristotle's philosophy, or to Spinoza's intellectual love of God. There is throughout an unbroken continuity; and while it is unnecessary here to trace the precise details of the evolution of the abstract idea from the concrete image, it is important to notice the extent

to which ideation controls human perception; but here, once more, I need do no more than refer to Stout's theory of noetic synthesis.

Whether, again, thought ever completely dispenses with images is a subordinate, and may be indeed a superfluous, question, analogous to the inquiry as to when the embryo becomes the fully developed individual; for the image is but the embryonic idea. But with ideation we attain the basis of the highest forms of human experience. The external world, with all its past and future, its imperceptible structure and its constitutive laws; the internal world, the manifestations of other minds, it may be of the Divine Mind itself; all are brought within the grasp of the individual finite spirit which originates in a microscopic particle of protoplasm. But with this we reach the second part of our whole inquiry—the true philosophic implications of ideation and its correlative—ideality; or, in other words, the true relation which should subsist between Direct Realism and a wider and more profound Idealism.

With reference to what precedes a brief comment upon Bosanquet's latest consideration of the unity of mind may not be out of place. I have argued that "images and ideas exhibit a threefold character . . . subjective mental content, logical significance and objective real existence".* This distinction corresponds to some degree with what Bosanquet has described as the Brentano-Meinong discrimination between "act, content and object, as inherent in" the relation between consciousness and its object; † discriminations which are, however, "quite unreal", because they do not permit "the real world to enter by virtue of identity into the world of knowledge . . . the two worlds are merely parallel and similar". The fundamental defect, that is, of the Brentano-Meinong theory "is that the mind is no longer taken all of a piece".‡

So far as my own treatment is concerned it has certainly never occurred to me to regard mind as made up of separable elements which become somehow put together in the course

* *Ante*, p. 191.
† *Nature of Mind*, p. 41.
‡ *Ibid.*, pp. 43, 44.

of the development of experience. I have on the contrary uniformly insisted upon continuity, so that while the evolving mind becomes incessantly more and more complex, and exhibits therefore an increasing number of new aspects or phases, still these always remain inherently united together so as to form one whole, instead of becoming separable entities as was the case with " faculty psychology ". Nonetheless this growth in complexity of structure and function must receive due recognition in psychological theory ; and whether we then place the emphasis upon the complexity itself, or upon the underlying and still more fundamental unity, depends on whether our point of view is primarily psychological or primarily logical. Logically, then, mind is itself a unity, and this unity must include the world which mind apprehends ; for otherwise, obviously, " mind " becomes a mere abstraction, since it is severed from its true object and loses everything upon which its essential function can be employed. This principle is fundamental to Direct Realism, which insists upon the immediate contact between the percipient and the physical universe ; " in a common sense-perception " (to quote Bosanquet's own words) " we are not aware of separation between content and object. The object is clothed in its content ".* Psychologically, on the other hand, this unity must be analysed into its structural factors, and the respective functions of these within the entire process carefully allocated ; and to this extent Psychology shares in the inevitable abstractness of all Science.

From this latter standpoint then Bosanquet has conceded all for which I have myself argued. " In the discrimination between content and object the content, it seems obvious to say, is existentially present in the mind when we judge or feel or value . . . you cannot do without ' content ' in some sense or other. There must be psychical matter in a mind." † This psychic content existentially present in every developed mind is constituted, as I have just maintained, by images and ideas or concepts ; ‡ these

* *Ibid.*, p. 50.

† *Ibid.*, pp. 46–48.

‡ It should now be superfluous to add that sensed content (or sensa) is not psychic content in any way.

are distinguishable from the apprehending activity itself, while at the same time they are not physical (as Alexander regards them). But when we turn from the nature of this content to its function, then we find, as Bosanquet has insisted, a fundamental unity; since this function is precisely to sustain an intercourse between mind and reality which is, in a sense, immediate and direct. Only this immediacy is not identical with *perceptual* immediacy; it is therefore a matter of definition; and the immediacy of conception and thought is effected by psychical pure image content which is absent—because it is unnecessary—in all perception of physical reality. This is indeed affirmed by Bosanquet himself; for thought always deals with "an object in the real world, construed or referred to by help of images of all kinds . . . reconstructs it out of psychical material . . . in thinking there is always imagery".*

* *Ibid.*, pp. 113, 155.

CHAPTER XVI

FEELING AND SENSE IN CURRENT IDEALISM

1. When we turn from the logical aspects of modern Idealism to its more purely psychological basis, we find too great an emphasis placed upon the functions of feeling and sense within the whole of experience; and although this never results in an explicit subjectivism, still it makes that transcendence of the subjective which is essential to Realism extremely difficult if not impossible. Its necessity is of course fully recognized.* But two further points also require consideration; first, the method by which this transcendence of primary feeling is achieved, and secondly the ontological nature of the reals which are experienced in perception. For Bradley the process is ideational; "in judgment this immediate unity (of feeling) is broken up".† Realism however is obviously more immediately concerned with the second of these problems; and any such account of the objects of perception as is given *e.g.* by Professor Baillie fails to establish their complete materiality as contrasted with the psychical character of mental contents and processes.‡ Such a view seems to share those defects of the terms "sense-datum" and "sensum" which were discussed at the beginning of this volume.§ For "sense",

* "Feeling is transcended always, in the sense that we have always contents which are more than merely felt. . . . The object not-self, and again the object and subject related before my mind, all that is more than mere feeling" (*Essays on Truth and Reality*, p. 175).

† *Ibid.*, p. 227, n. 1. *Cf.* below, p. 200.

‡ "The nature of a perceived thing *from first to last*, is resolvable into elementary universals belonging to the sphere of sensibility. There is *no more*, so far as Perception goes, than just this specification of a universal of Sense into sensuous universals (which) are themselves a plurality of sense elements . . . qualities of Sense" (*Idealistic Construction of Experience*, pp. 164, 161. My italics).

§ *Ante*, pp. 16 *sqq.*

" sensation " and " feeling " are primarily attributes of conscious beings—are primitive modes of consciousness; so that to resolve the perceived physical universe wholly into " sense-elements " or even into " sensuous universals " threatens to infect Idealism with an incurable subjectivism; the material thing " breaks up into a plurality of sense-qualities " besides which there is nothing whatever else except their correlative unity *as* a thing; for " these qualities are the positive content of the object ".* The final result therefore is that the perceived object is " the elements united. There is no separation between the being of the object and the perceiving of it—a position which Berkeley sought to establish by another route. For idealism this is literal truth " ; † nevertheless it is a truth which is too dearly bought if it implies the resolution of the object *completely and exhaustively* into " sense qualities " or " sensuous universals " ; a conclusion which I have endeavoured to exclude by employing the neutral term " sensed contents ".

The ultimate issue turns, obviously, on the nature of consciousness as such—on its powers of apprehension—on the inherent limitations of its range ; and in this connection the familiar doctrine that the mind, simply because it is mind, can directly apprehend only what is mental still colours too deeply the really essential principle that mind —again as mind—is competent to apprehend (in principle) the whole of reality, not because this is mental but because it is rational. It is patent, of course, that rational activity is, from the psychological point of view, a complex of subjective mental processes.‡ But this does not necessarily imply that the objective content thus apprehended, being also rational, is therefore also mental. Such a conclusion both lacks a sound logical basis and contradicts the facts of the case ; and though the matter may be no more than one of terminological accuracy, still the use of the phrase

* *Ibid.*, p. 162. Even " thinghood "—permanence—stability—is " in the sphere of Sense ; its content is Sense " (p. 163).

† *Ibid.*, p. 156.

‡ *Cf.* " a complex of psychical matter which may be called a mind " (Bosanquet, *Three Chapters on Mind*, p. 72).

" conscious content " confuses the issue from the outset. " The general quality of all sense-experience," continues Baillie, " is the simple immediate existence of a conscious content. . . . Conscious content simply *is*." * But no content, as such, can itself be conscious; it can only be cognized—apprehended—through some mode or other of the activity of a conscious subject, no matter what the precise character or level of that mode may be—whether sensuous, perceptual, or ideational. Baillie however not only resolves " the elements of the object of perception into separate conscious parts ", but refers further to " the conscious relation of these to each other ".† But just as no content can itself be conscious, so the relation between its constituent parts cannot be conscious either. Consciousness is the relation which subsists between the subject and its object; and the latter then forms a unified whole even though it must at the same time be internally differentiated and therefore relational. But the relations which thus subsist *within* the object can never be identical with the relation between that object itself and the conscious subject.

It is impossible therefore to begin our investigation by describing content in this way as " conscious ". For its nature, whatever it may be, can be determined only by mental activities higher than sense itself; and then our first conclusion is simply that " we have a Sense-experience . . . the mere awareness of an *immediate* content ".‡ But an immediate content need not therefore necessarily be a " conscious content " ; its actual nature can be ascertained only by further examination of the total situation—that is of subject, of object, and of their relation, as these elements continuously differentiate themselves out of the primary immediate totality; realism then maintaining that the physical world is universally characterized by the attributes of extension and resistance—attributes which are invariably absent (if the terms are used with one and the same

* *Ibid.*, p. 148.
† *Ibid.*, p. 168. *Cf. ante*, p. 17, on " mental content ".
‡ *Ibid.*, p. 153; my italics.

meaning) from all mental content, as are also the greater number (to say the least) of the qualities usually called " secondary ". *

If therefore we recognize that the characterization of all objects of consciousness is never the deliverance of sense itself, but always of a higher level of mental activity, we may accept the principle that a material " thing " is " a plurality of elements at once apart and indifferent to each other, and yet forming a unity . . . the thing just *is* the content of the act of perceiving ; the *process* of perceiving *realizes itself* in the consciousness of a thing. In a thing the universal consists in a unity of various qualities lying side by side " ; and we may supplement this by admitting that " we cannot regard sense-life as having any independence of the subject. A sense-experience which implies no subject of such experience seems meaningless ".† But, once again, the elements and qualities need not necessarily be sense-elements ; they are simply elements of the unitary object, and as such share its own nature, whatever that may prove to be in the light of further analysis.

2. Bradley's treatment of this subject is open in principle to the same criticism.‡ My whole apprehended universe is, from his initial standpoint, " states of my mind ", " my psychical condition ", " psychical being ", not simply as felt, but equally as perceived and as thought. Such a conclusion, once again, cannot be the deliverance of sense-experience as such ; and when we appeal to reflection, it contradicts the patent facts of the situation ; for the perceived universe is the object or the content of mind,

* Baillie however seems to hold that, so far as these are concerned, there is no " ultimate difference in the content of Perception between the objective and the subjective side . . . perceiving and perceived qualities are mutually dependent " (*Ibid.*, p. 156).

† *Ibid.*, pp. 170–172.

‡ " Other bodies and souls, and God himself, are (so far as I know them) all states of my mind, and in this sense make part of my particular being. . . . We may use as an example my horse or my own body. . . . If you push home the question as to their given existence, you can find it nowhere except in a state of my soul. When I perceive them, there is, so far, no discoverable ' fact ' outside of my psychical condition " (*Appearance and Reality*, pp. 300, 301).

but it is never a *state* of mind. It is almost unnecessary to add that one main purpose of Bradley's idealism is to trace the process whereby such content is cognized by the individual mind, this process being, as already remarked, ideal or ideational.*

His further analysis, however, is altogether fatal to his initial standpoint. "We are led at once", to begin with, "to the distinction between the diverse aspects of content and of psychical existence. Our experience is, essentially and very largely, ideal. It shows an ideal process which, beginning from the unity of feeling, separates the divisions of the world from themselves and from me"; † and it will materially condense my own remarks at this point to refer also to Bosanquet's treatment of the same problem in the second edition of his *Logic*.‡ In the first place then, this "ideal process" is primarily due to "the blind pressure and the struggle of *changed sensations*, which first begins to loosen ideal content from psychical fact"; § but the essentially transient nature of these "sensations" raises a fundamental difficulty. Their transience is emphasized by Bradley himself: "if then, beginning from within, I take my whole given experience at any one moment, and if I regard a single 'this-now', as it comes in feeling and is 'mine' [that is, a sensation] . . . such existence is too fleeting".‖ But when we reduce all sensed content to the same status of transience with admittedly psychical content, it is impossible for experience ever to transcend the transient—impossible even to know its content to be transient. Nor is this *impasse* removed by any theory of meaning or implication or significance or symbolism, such as is expressed by "what is *meant* by any one of the portions of my world is emphatically not a mere fact of experience".¶

* *Ante*, p. 196. † *Loc. cit.*

‡ Vol. ii. chap. x.: "The Relation of Mental States to Judgment and to Reality."

§ Bradley, *op. cit.*, p. 479. My italics.

‖ *Ibid.*, p. 300.

¶ Bradley, *ibid.*, p. 301. *Cf.* Bosanquet: "all mental states contain matter that has been and may be significant . . . all sensational or perceptual contents bear the stamp of some symbolic relations . . . signifying some object of thought" (*Logic*, vol. ii. p. 295).

For granting that we can know that sensations are symbols, still how can we know merely from themselves the character of what they symbolize? In order to know (*a*) their own transient nature, (*b*) their symbolic function, and (*c*) what they symbolize, there must be presupposed the revelation of the permanent reality compared with which they are transient, and which we can then regard them as symbolizing; for no symbol can show what it stands for, apart from some independent revelation of the signified content. In general, therefore, to appreciate the symbolical function of transient psychical images we must, on some occasions at least, experience the signified real apart from them, independently, and as directly as the psychical content itself is experienced. This we do in the form of the sensed constituents, taken purely in themselves, of all perceived content:—the basal principle of Direct Realism as already put forward in my earlier chapters.

But wholly apart from these positive difficulties, Bradley's own statements imply the fatal inconsistency of his entire theory. For even if we grant that the "ideal process", which he regards as transforming the transient into the permanent—the psychical into the physical *—achieves the indispensable transcendence, still this is attained only at the cost of "discrepancy" and "irreconcilability".† Recalling the insistence laid by Bradley upon the importance of feeling as one basal element in experience as a whole—that is in thought and knowledge—the fuller development of his theory, necessitating as it does this destruction and perishing of feeling as such, makes impossible demands upon his initial starting-point; so that, in the end,

* *Cf.* "Thought adds no element to feeling, but merely reorganizes its matter" (Bosanquet, *loc. cit.*, vol. ii. p. 299).

† "Existence is a content which works apart from, and is *irreconcilable with*, its own psychical being; it is a 'what' *discrepant with*, and transcending its 'that' . . . objects exist, so far as the psychical states do *not* exist. For such experience of objects is possible, only so far as the meaning breaks loose from the given existence, and has, so regarded, *broken this existence in pieces*. If my psychical state does not exist, then the object is destroyed; but again, unless my state could, *as such, perish*, no object would exist" (*Loc. cit.*, p. 301. My italics mainly).

we must admit either that something quite other than feeling itself enters as a primary constituent into what is experienced, or that we can never have anything more than "a subject without windows or doors opening on nothing beyond itself".* It is obvious that mind does attain far more than this, otherwise there would be no problem of knowledge whatever; my argument here, however, is that Bradley is precluded by his own subjectivist premisses from advancing to his final position that "the Universe and its objects must not be called states of my soul".†

3. But the same failure to distinguish between feeling as a subjective process or activity, and content which, while indubitably always felt, may still in its own nature be quite other than feeling or sensation, characterizes Bradley's later volume *Essays on Truth and Reality*. "The object not-self, and again the object and subject related before my mind, all this is more than mere feeling." But nonetheless does all such content remain "my *state* . . . a whole of which I am immediately aware. . . . The entire relational consciousness is experienced as falling within a direct awareness"; and thus once more we find content regarded as, originally, a "state" of the apprehending mind, or (in other words) as consciousness rather than as the object of consciousness. It may be argued that to speak thus of any "object of consciousness" is illogical, since it implies reflection rather than simple feeling. But while this is undoubtedly true, still it equally prevents our characterizing what primarily exists in any way whatever —either as feeling or as state; for *all* characterization implies reflection. As Bradley at once continues, "it can neither be explained *nor even described*, since description necessarily means translation into objective terms and relations".‡ If then we are to adopt any definitely descriptive terms whatever "feeling" is unsuitable because of

* *Life of Edward Caird*, p. 307.

† *Appearance*, p. 301. I do not think this difficulty is removed by Muirhead's comments on Bradley in *Mind*, vol. xxxiv. pp. 179, 180.

‡ Pp 175–177. My italics.

its predominantly subjectivist implications. It is true, as Bradley contends further, that there exists a primal " unity, complex but without relations, without distinction or relation in itself " *—the original undifferentiated experience continuum of Ward. But this is all that can be said about it, unless we choose further to call it " experience ", meaning by this however something completely neutral and uncategorized. Experience necessarily implies somewhat experienced ; this view however is rejected by Bradley. " The distinction between the experienced and experience seems in the end totally inadmissible . . . there is no difference between the state and its content, since, in a word, the experienced and the experience are one ".† There is a sense in which this is undeniable ; for we have here one instance of that ultimate and inexplicable continuity which unites all discriminated reals within the absolute and unbroken whole of reality. But if we desire to characterize these basal instances, we are powerless to do more than retain our distinctive terms and then to couple them together to form a unity ; so that, in the case before us, we must speak of the unity of subject and object—of experience and experienced—feeling and felt—state and content, rather than employ any single term such as feeling or experience or state. Bradley's own position, however, is perfectly definite. " The given fact is a single whole of feeling. . . . Our fundamental fact is immediate experience or feeling "—a standpoint which is, however, far more truly expressed as " reality and myself in unbroken unity ".‡

Hegel's own treatment of feeling and sensation is obscure ; but it is certainly free from any crude subjectivism and implies nothing that is really inconsistent with Direct Realism. The external world—Nature—is always regarded by Hegel as real ; the term " real ", in fact, was for him

* P. 194. † *Ibid.*

‡ Pp. 247, 316. *Cf.* " It is the equivocation between feeling and felt thing that furnishes (Green) with his criticism on empirical thinkers. His mode of stating the question seems to involve the existence of mere feeling as that which thought transforms into a system of stable facts. He sees this himself " (*Hegelianism and Personality*, p. 79).

synonymous with the sensible ; * but Nature is not the *highest* form of reality—it is not (again in Hegel's own peculiar sense)" actual " ; for only the Whole is " actual ", and is so because it is systematic—rational. It is true that, as with Bradley, " everything is in sensation (feeling) " ; but here " sensation " and " feeling " are essentially processes always correlated with an object other than themselves. We have therefore " first consciousness in general, with an object set against it . . . sense-consciousness is aware of the object as an existent, a something, an existing thing, a singular, and so on. It appears as wealthiest in matter but as poorest in thought ".† Thus far then the fuller character of the object remains undetermined ; it is as yet neutral, neither physical nor psychical, material nor mental. It is somewhat difficult to reconcile with this suggested interpretation the immediately following passages : " that wealth of matter is made out of sensations ; they are the *material* of consciousness " ; and the object of perception then becomes " a combination of sense qualities with attributes of wider range by which thought defines concrete relations and connections ".‡ This discrepancy however, taken at its worse, is obviously not fundamental ; it may spring from nothing more than ambiguities of terminology or even of translation ; and Hegel himself was never particularly interested in points of pure psychology. As he says elsewhere with reference to " the explanation of Sense ", " to name the organ does not help much to explain what is apprehended by it . . . in Experience there are two elements. The one is the matter, infinite in its multiplicity, and as it stands a mere set of singulars : the other is the form, the characteristics of universality and necessity ".§ There is here a marked contrast with Bradley's position, for which " the experienced and the experience are one " ; and while Hegel fully accepted the fact of our " immediate consciousness of the existence of external things . . . sense-

* *Cf.* p. 304 below.
† *Hegel's Philosophy of Mind* (Wallace), pp. 176, 198.
‡ *Ibid.*, pp. 198, 199.
§ *Logic* (Wallace), sectt. 20, 39.

consciousness", he is concerned not so much with the ultimate nature of these "external things" as with the principle that this level of experience is "the slightest of all cognitions . . . the sensible world as such is altogether void of truth".*

I cannot resist the impression that the foregoing interpretation of Bradley's position is confirmed by the criticisms which have since appeared in *Mind*.† Throughout his later work there appear to me to be clear indications that its further development would involve a radical modification of his earlier position on many fundamentally important issues. But I will conclude by referring to two additional passages in the second edition of *The Principles of Logic*. We find then that the basis from which judgments of perception "start, and on which they act, . . . is a sensuous whole which is merely felt and which is not idealized. . . . We needs must begin our voyage of reasoning by working on something which is felt and not thought"; but at the same time this "original material" must undergo "alteration".‡ Thus once again we have a content which is felt, and may so far therefore be either objective or subjective according as later investigation proves; but on the other hand its description as a "*sensuous* whole" appears from the outset to preclude its being regarded as anything other than subjective feeling. Precisely the same difficulty appears in the later comment on "this", which is again described as "*felt* . . . an aspect of immediate experience"; and once more the content is referred to as "feeling"—"feeling may be used of the whole mass felt at any one time".§

At the same time, of course, Bradley maintained that the "this", whatever its ontological character may be, is

* *Logic* (Wallace), sect. 76. On the Hegelian sense of "truth", *cf.* below, pp. 271, n. §, 284.

† Vol. xxxiv. pp. 13–69. The basal difficulty seems to lie in the ambiguity of "experience".

‡ Pp. 479, 480.

§ P. 659. *Cf.* with this the perfectly definite statement: "Reality is sentient experience. To be real is to be indissolubly one thing with sentience . . . something which, except as an integral element of such sentience, has no meaning at all" (*Appearance and Reality*, p. 146).

inseparable from the real whole which contains and transcends it. This further principle, however, is obviously quite distinct from the questions discussed in the present chapter ; certain phases of its presentation by Kemp Smith have already been criticized, while my own interpretation of it is outlined in the later chapters of the present volume.

CHAPTER XVII

A REALISTIC THEORY OF MATTER AND SPACE

Part I

1. Every type of Realism, whether it falls within a more inclusive Idealism or not, maintains the independent existence of reals which it describes in negative terms as non-mental, and positively as material or physical. These reals form a totality or world sharing a common nature and exhibiting common attributes; of which a few are present universally, while the remainder are restricted to the various specific types of material things. These qualities are so diverse, and their interrelations so complex, that their systematic correlation constitutes a difficult problem, equally from the scientific and the philosophic standpoints. Philosophically, it is the old riddle of material substance and of extension—questions that have received, like so many others, the first indications of their final solution from scientific discovery, although this in its own turn raises fresh problems of equal if not indeed greater difficulty. The ultimate issues however may be summed up under a few main aspects. How does the concept of matter, or material substance, arise in the course of experience? What is the relation between matter, as a persistent Real, on the one hand to its diverse and incessantly changing qualities, and on the other to extension or space? Finally, how does the concept of time develop? and to what degree does it truly express the actual nature of time?

It is obvious that these problems are all intimately connected together. Matter is extended, while all events and processes go on in time; or, at least, they appear to

occur in time, and even necessarily so to occur, so far as all human—and it may be all finite—experience is concerned. But at the same time the question of matter seems to have a certain logical priority; for the resistant inevitably forces itself definitely upon consciousness before either the spatial or the temporal, purely as such. In concrete experience, of course, it is impossible to dissociate these three entities—matter, time and space—from one another. Their union is so indissoluble that they constitute a triune continuum, from which the space-time continuum becomes, at a later stage, distinguished as a separate aspect. This latter again, regarded *as* a continuum, is the product of recent scientific investigation; for ordinary space, time and matter are looked upon as existents that are not continuous, but diametrically different. Thus the modern insistence upon their continuity reflects a fundamental feature of concrete experience which is overshadowed by the absolute differences between the three elements concerned—differences so profound that they have determined the course of speculation since the dawn of philosophy.

This logical priority of the problem of matter as the resistant, however, is merely relative. For since all material objects are extended, the question of the nature of space arises almost as soon as does that of matter; and we must therefore distinguish the standpoint of philosophy from that of science. Scientifically it is necessary to allocate the investigation of the properties of space to geometry, and of matter to physics; although even here the separation cannot be absolute, as is shown by the recent ascription of physical qualities to space in Einstein's theory.* Philosophically, on the other hand, it will be more convenient to combine the discussion of matter with that of space, and to relegate the subject of time to a separate chapter. For the spatio-physical universe is but one element within the whole of reality; whereas all reality, and all human experience, present temporal aspects; and this raises the crucial question whether these aspects are actual charac-

* *Cf.* below, p. 225.

teristics of reality or only appearances which arise from the very conditions of finite experience.

But it is necessary to observe, in the first place, that the modern theory of the space-time continuum by no means implies that these two existents, in thus constituting a continuum, lose their separate and contrasted natures so as to become merged or transformed into some completely new type of real which itself is neither spatial nor temporal. Much confusion prevails on this point, increased by a misunderstanding of the term "dimension". Unfortunately, the ordinary meaning of "dimension" is inevitably and incurably spatial. Perception reveals space of one, two, or three dimensions but never of any higher number; mathematics, on the other hand, is familiar with the concept of n-dimensional space. It is perfectly natural, therefore, that when time is referred to as an additional dimension, and space-time as being four-dimensional, the impression should arise that time is really in some way or another a form of space, and the space-time continuum a four-dimensional space, which cannot, however, be perceived as such, but which assumes for perception the aspect of ordinary space and time—an aspect illusory or unreal, and to be somehow transcended therefore in science and philosophy. Some such conclusion as this has frequently been drawn from the scientific Theory of Relativity; but it is radically erroneous. Space and time are not the only dimensions dealt with by modern Physics—inductivity, for example, is a dimension which is neither spatial nor temporal; and a "dimension" may be defined as one of the fundamental attributes of the physical world, or as any aspect of these attributes which may be conceived, even though it can never be perceived. All that the Theory of Relativity implies therefore is that time and space may, for the purposes of Physics, be combined together and dealt with as conceptual aspects of a four-dimensional continuum. The advantages of this procedure for mathematical calculation and physical investigation can be adequately appreciated by only the specialists in these subjects. To cite one of the simplest instances, the actual motion of a

point is in itself a phenomenon necessarily involving time and change; but by employing the concept of the four-dimensional continuum the motion may be represented as a stationary curve in four-dimensional space; and the resultant simplification of procedure is at once obvious. But here it is important to notice the word "represent"—motion is *representable* by a stationary curve; and this is far from implying that time is transformed into space; representation, in short, must not be confused with identification or transformation.

When therefore we pass from scientific theory to philosophy it remains absolutely essential to distinguish space from time, as each being an entity with its own unique characteristics; and this indicates another source of serious confusion—that between our original sensuous or perceptual apprehension of these entities, and our concepts of them. It is extremely probable, if not indeed inevitable from the very conditions of experience, that our earliest concepts will present self-contradictions, as *e.g.* in the familiar Kantian antinomies; and it is further possible that these contradictions can never be overcome, as Bradley has suggested. But however this may be, we are by no means justified in arguing from the inadequacy of our concepts to the unreality or subjectivity of space and time themselves. On this issue the deliverances of perception, to begin with at least, must be accorded due recognition—they must not be ignored nor denied merely because we have as yet been unable to form finally adequate concepts as to the nature of time and space. This negative conclusion may indeed be supplemented by a more positive attitude; for we may argue—in agreement with my later presentation of Hegelian logic—that the fuller development of the concepts involved here will in itself prove sufficient to solve the initial contradictions.

It must be recognized that we are dealing with the fundamental entities of the physical universe—so far as time is concerned, indeed, with a fundamental characteristic of all existence as apprehended by finite minds. We may anticipate therefore that our final concepts will

be extremely intricate, as has been recently evidenced in the Theory of Relativity; and that even this complexity may remain always unequal to the complexity of reality.

2. With reference then to our awareness of time and space, I have already maintained that they are elements or aspects of sensed content; * they are not apprehended by any special faculty of "intuition" that is concerned with them alone while all other qualities are sensed. It is obvious, of course, that perception is the result of an intricate evolutionary process. But this complexity need not necessarily imply the fusion of two distinct activities, intuiting and sensing; for it is equally explicable as the increasingly definite apprehension, on the basis of sensing alone, of all the qualities of the physical world. The fact that colour and extension are always perceived simultaneously is more simply, and therefore more logically, interpreted as the result of a single activity than as the fusion of two different processes—processes, further, which can be discriminated only in theory and never in actual experience. It is true that the consciousness of infants and (we must suppose) of the lower animals reveals a content that lacks all definite characteristics—an almost completely undifferentiated field. All the higher forms of consciousness, again, present time and space as universally existent. But these facts no more imply an independent "intuition" than they imply the dependence of the final definiteness upon the development of the perceptive process alone. For just as in focussing a telescope or a microscope, this definiteness of character really exists all the time; and both spatially and non-spatially, temporally and non-temporally, it becomes more and more clearly discerned as the optical adjustment proceeds. Here we must again maintain the distinction between sensing and sensed content; and then the evolution of consciousness, with its characteristic

* "Time and space are presented in the directly sensed content of experience; their actual appearance is unaffected by all our theories equally, which cannot alter its inherent character" (*ante*, p. 25, and footnote).

advance towards an ever completer and more precise differentiation, concerns not the apprehended *content* but rather the apprehending *process*; while as regards the spatio-temporal qualities themselves, it is (to repeat) logically simpler to regard them as being originally sensed in the same way as the non-spatio-temporal. It is from this general standpoint that I shall discuss, first the problems of space and matter, and secondly those of time.

The concepts of matter and space, then, like all others, are obtained by complementary processes of analysis and synthesis—of abstraction and construction; and their paramount importance for philosophic Realism arises from the fact that these activities are concerned at first wholly, and always predominantly, with the content of perception; these concepts, in other words, are the results of the systematization of all perceptual experience. It is from the infinite diversity of this content—a diversity which nevertheless forms a continuum—that there are abstracted visible extension, tangible extension, and tangible resistance, as elements universally present either separately or in combination; and in accordance with my earlier arguments for Direct Realism I shall regard these entities as objectively real, not as subjective nor epiphenomenal; their specific modes then being the essential characteristics of physical things or objects.

With reference to visible extension, again, there arises a further distinction. For this is perceived sometimes as coloured, and sometimes as uncoloured, empty, or "pure" —although in these last instances it is illuminated. We have here, obviously, one of the most fundamental contrasts that experience reveals. For it constitutes what the ordinary person regards as one of the differences between existence and non-existence—between something and nothing. It is true that this naïve distinction is inadequate philosophically; nonetheless does it remain of profound importance that our philosophy should take its rise from, and should always remain in close touch with, naïve experience; and it is only from this basis that any profitable

philosophic discussion, as distinct from scientific analysis, of our present problems can be conducted. For one of the most fruitful sources of difficulty in this sphere of inquiry consists in the restriction of our attention to the scientific *concepts* of time and matter and space. These concepts, of course, are of the highest value and significance ; nevertheless it has far too often been forgotten that they *are* concepts ; and the result has been that radical confusion between these existents themselves, *as* existents, and our concepts of them, which has plunged speculation again and again into subjectivism and has, still more recently, distorted the interpretation of the scientific Theory of Relativity. Because concepts are psychologically subjective, while at the same time it is only when space, time and matter are conceptually analysed that any results of importance can ever be attained, it has too hastily been concluded that these entities possess no aspects other than the conceptual, and that their perceived characters, being confused and indefinite, are therefore negligible or even unreal. But this indefiniteness and obscurity are but the inevitable results of the conditions of perceptual experience ; they are by no means characteristic of the object or content of this experience. For this perceived content must inevitably be experienced as a highly intricate continuum, whose complexity mere perception can never finally overcome. Nonetheless are the various elements of this continuum—space, time and matter—in themselves definite and real ; and it is only when philosophy recognizes this principle, and so accords to the concrete content of perception, and to the abstract concepts of science, their relative character and value, that any true conclusions can be attained. We must begin, then, with the naïve distinctions between things and space —between something and nothing—between existence and non-existence—as when *e.g.* even the philosopher and scientist agree with the plain man in saying "there is nothing in that empty box"—and trace the development, and judge the validity, of our philosophic theories of matter, space and time. Too often it is assumed from the outset that the complete nature of these reals is expressed by

abstract ideas; the inevitable consequence being that their contradictoriness becomes attributed to objective time, matter and space themselves.

3. To return to the relation between visible, empty, or "pure" extension and coloured extension (or extended colour), to suppose that the first is apprehended by "intuition" and the second by sensing, so that colour, as colour, is not extended at all, but is perceived as extended owing to the simultaneous activity of sensing and intuition, is a totally superfluous complication of our theory; for the operation of "intuition" is a mere assumption which has no evidence in experience, either intro- or extrospective. Undoubtedly extension and colour are originally co-presented, and the distinction between them—first in perception and later in conception *—is a gradual development. But nonetheless is it a distinction that is perfectly simple and most easily attained. The incessant changes of colour within one and the same extension, and of extensions which still remain of the same colour—experiences which are further of the highest interest both to animals and infants—necessarily emphasize the essential difference between these two entities; while the relatively uncoloured intervals between brightly coloured areas are associated with precisely the same muscular movements and psychical adjustments as are the latter themselves. Thus colour in itself, and the extension with which it is always co-presented, rapidly become discriminated from each other; and it is then quite legitimate for the ordinary individual to regard coloured extensions as "occupied", in contra-distinction from pure or empty extension; only, so far as my theoretic analysis has as yet proceeded, they are occupied simply by colour itself (it must be recalled that we are here considering visible extensions only). In actual experience, however, these coloured occupied extensions are invariably perceived to be both tangibly extended and resistant—in the latter instance both tangibly, in the sense that motion of the percipient's

* It must be remembered that the first of these stages, but not the second, characterizes the experience of the higher animals.

body, in whole or in part, is therein difficult or impossible, and also visibly, so far as the penetration of one coloured extension by any other is similarly difficult or impossible. It is true that to this general statement exceptions are constituted by the diffusion of gases and by mirror reflections and their analogues ; but the first instance is satisfactorily accounted for by physics and the second by my theory of appearance and reality.

Omitting these exceptions therefore, the characteristics of all perceived objects are coloured extension, tangible extension and tangible resistance—the latter readily associated with visible resistance as the mutual exclusion of one coloured area * by another ; and this combination finally becomes sharply distinguished from pure extension or empty space, which is visible but uncoloured, intangible, and in and through which objects—including the percipient's body—may move without resistance. Here the essential points are that, in spite of the absolute difference between these various perceived contents when they are separately apprehended and then compared with each other, they nevertheless form those existential unities which are called pure space, and material object or thing ; and they are thus experienced together, prior to their theoretic discrimination, because they really exist together. Undoubtedly the psychological problems concerning this highly complex experience are difficult and obscure ; but when the distinction between the process and the content of awareness is adhered to, these difficulties necessitate no subjectivist theory of the nature of the content thus apprehended. Nor need our philosophic discussion take account of their full psychological detail any more than it need of the delicate adjustments of a telescope—adjustments which are, really, nothing more than the artificial extension of the natural processes of the mind-body organization. Just as these adjustments are wholly separate from the observed objects, so are the psychical activities in question existentially distinct from all perceived content ; and to transform the psychological subjectivity of these activities into an

* Or volume (throughout).

ontological subjectivity of their content is a confusion which has already been sufficiently insisted upon. For as I have previously argued,* this content may originally appear as an undifferentiated continuum without therefore being subjective; and if subjectivism is thus repudiated, space and things alike are both objectively existent in the same sense.

Nor is the issue affected by the Theory of Relativity. Whatever may be the precise nature of space-time as a whole—whether it be finite or infinite, limited or unlimited, "curved" or "uncurved"—the epistemological and ontological problems remain unaltered. It is still objectively existent spaces and times (or space-times) that are perceived, not entities that are subjective or (in Kant's sense) phenomenal; and it is upon this perceptual experience of objective reality that every scientific theory alike of space-time must be based.† From this primal continuum, further, the various modes of extension and resistance become at one and the same time differentiated and associated—these two processes going on *pari passu*, until finally empty space as one complex, and the material object as another, are first perceived, and then crudely conceived, as mutually and necessarily implying each other, since both are alike extended, while on the other hand one is absolutely distinguished from the other by its tangibility and resistance.

4. But at this point we must again observe the results of the dominance of the visible content of perception. I have already emphasized its importance, first in its bearing upon our apprehension of existents and secondly with reference to the primary concept of causality;‡ and we are here concerned with what is but another aspect of the same phenomena. "The visible totality, because of its relative uninterruptedness, clearness and diversity, seems to be self-sufficient and self-maintaining; its principal elements therefore come to be regarded as the causal ante-

* *Ante*, p. 167.
† *Cf.* my earlier references, *ante*, p. 27.
‡ *Cf. ante*, pp. 41, 151.

cedents of tangible percepts." Now this causal antecedence obviously implies the differentiation of the visible from the tangible. But there must now also be noted the correlated *unity* of these two differentiated elements; and this unity presents a dual aspect. In the first place, the visible and the tangible constituents, although sharply differentiated from one another, are still subsumed, as its attributes, within the unity of the thing; and (secondly) this subsumption is carried to such a length that, for the naïve realist, it becomes actual identification. The result is that the visible object is tangible, and the tangible object also visible; or perhaps more precisely, the object is at once visible and tangible. It is obvious that the difference between this description of experience in terms of the object and its attributes, and that in terms of causation, is not an absolute difference but simply a matter of standpoint and interpretation. For in both instances alike the visible and the tangible are mutually correlated, first under the attributive category, and secondly under the causal; although this interreference is originally wholly pragmatic and unreflective in precisely the same way as are "appearance" and "reality".*

Thus the Thing is at first the persistent objective unity of resistance and the two modes of extension. These are *always* present, and are further always combined, only far more loosely than among themselves, with an enormous diversity of other attributes which are, as a whole, incessantly changing. This patent contrast between their own omnipresence and immutability, and the transience of the remaining attributes, inevitably results in their finally coming to constitute the underlying essence or core of all objects without exception; they are real or reality, while the Thing's other characteristics may all be mere appearance.† But this essential distinction speedily undergoes a still further expansion which markedly deepens the meaning of "reality" in its connection with these its

* *Cf. ante*, p. 75.

† *Cf.* Chapter V *ante* on the development of the distinction between appearance and reality.

fundamental characters. For we must here remember that the real, as such and in its complete nature, is experienced only on rare occasions; in the vast majority of instances the content of experience is appearance.* But appearance —and again as such, *as* appearance—is always *significant* of that reality which is absent from immediate sense-perception; and thus a further inevitable step in the development of experience occurs. For there now arises an uninterrupted, though still automatic, practical, and unreflective, reference of the actually sensed appearances to existents which, although not at the moment themselves sensed, are nevertheless real; and the final consequence of this incessant and systematic reference of appearances to reals is that the latter become Things which possess the former as their attributes. Fundamentally, the distinction here made is that between constancy and change; and from this point of view it is easy to trace its further development into the contrast between the primary qualities and the secondary and tertiary.

Thus far there are no serious specifically epistemological problems, although the accurate psychology of this level of experience is still a highly debatable subject. But just at this point our originally pragmatic and unreflecting mental activities are carried onwards, by the mind's own inertia as it were, or perhaps more truly by its indestructible impetus towards self-expansion, to the creation of concepts which have always presented profound philosophic difficulties—to the ideas of substance and matter, with their later correlates of physical force and energy. The "thing" of everyday experience yields place to the "matter" of speculation; for there has now arisen the fixed habit of interpreting appearances in terms of that underlying reality of which they are significant; and this reality, thus far, is simply the unity of resistance and the two modes of extension. It is therefore complex, while the unreflective mind always seeks the utmost simplicity; and this desired simplicity it now attains by a further process of reference —by regarding resistance and extension no longer as reality,

* *Cf. ante*, p. 24.

but as themselves attributes—the attributes of a still more fundamental real which is termed "substance" or "matter". This crucial advance—for, despite its difficulties, it is an advance from the primary purely practical standpoint—is supported by many subordinate features of experience. For in spite of their relative constancy as compared with all other attributes, extension and resistance themselves undergo change within very wide limits; and yet they must in some degree continue to be experienced if any object is to be perceived at all. Thus there gradually arises a crude idea of resistance-in-general and extension-in-general as something existentially distinct from any actually perceived resistance and extension; and this vague and ill-defined concept is then quite easily hypostatized as "material substance", endowed with these attributes as primary and with their associates as secondary.

But with the problem of the more positive character of "substance" as thus crudely conceived—a problem which becomes obvious once really systematic reflection is undertaken—the average individual is not concerned. For he has now obtained an idea so apparently simple and clear, and of such supreme practical value in systematizing the wide diversity of actual experience, that even the arguments of a Hume make scarcely any impression upon it, any more than upon the correlative concept of the self. Thus have arisen those concepts of "self" and "substance" which, like uneasy spirits, have haunted the devious path of modern philosophy. But, almost to the same degree as the rude deities of the savage, they satisfy the insistent demands of the ordinary unreflective mind for unity and simplicity, and by so doing override all theoretical difficulties. It remains content therefore with the merely negative view that material substance is something other than the combination of extension and resistance—a standpoint that has perhaps received its most definite expression in Locke's definition of substances as "subsisting independently or by themselves", together with his conclusion that all the idea can yield is "an uncertain supposition of we know

not what ". For just as perceived extension and resistance, when isolated and regarded in themselves, prove to be absolutely disparate from all the other attributes of things, so in precisely the same way " substance ", although its actual nature is unknown or even unknowable, may quite conceivably be wholly different from resistance and extension as its primary qualities.

Thus what is perhaps the most difficult problem of all in this connection receives a satisfactory *practical* solution—that is the uncognizability of " substance " in itself. For we have already observed that in innumerable instances the " reals " of the naïve realist are not themselves apprehended —are frequently indeed not apprehensible—but are known only indirectly by means of their appearances. But at the same time this does not prevent their being occasionally perceived immediately, either in their own actual nature or at least sufficiently adequately for life's practical purposes.* This readily enables the naïve realist to believe that " substance " may in some manner become directly apprehended; in the meantime it may be accepted as an unknown but nonetheless existing entity—a view which, in the light of even Locke's uncertain conclusion, is *practically* beyond criticism, especially when it discovers a modicum of positive characterization in the definition of " substance " as " that which occupies space ".

Part II

5. It is unnecessary to trace any further the detailed development of this semi-reflective concept, which also constitutes, in virtue of the patent contrast between the independent existence of substance and the organic conditions of sense-experience, one source of subjectivism and phenomenalism; and I shall now proceed to consider the true significance of the term " matter " in modern science and ontology, intimately allied with this being the meaning of " space ". For just as we have found

* *Cf.* instances cited *ante*, p. 24 text and n. (2).

that naïve realism as a whole, including its distinction between reality and appearance, has its own degree of logical consistency, so the concept of extended material substance is likewise not wholly devoid of a rational basis.

Once more we must begin with the patent contrast between visible empty space, and visible occupied space, as already elucidated. But this contrast must now be regarded in the light of the inseparably associated tangible and motor elements of the entire complex percept. It is then obvious that empty space is a more fundamental factor than occupied space, as is indicated by the usual meaning of "space" being empty space, so that the term "empty" is almost redundant. For empty space is universal, while its occupied parts are merely local; within it motion occurs, and it is sometimes occupied, sometimes vacant. Nor so far as actual perception is concerned, and apart from mathematical theory, do its dimensions offer any serious difficulty. Empty space, in my own opinion, is directly perceived as tridimensional; the third spatial dimension —depth or volume—is therefore perceived just as immediately as are the other dimensions of length and breadth. Certainly depth comes to be thus perceived at a later stage in experience than the other two; but this is simply because it is a further development from earlier experience, not because it is itself purely conceptual, as are spaces of higher dimensions than three. Despite this later development, however, depth remains a perceptual content, although it is of course also capable of being conceived. The complete detail of this evolution is a matter for psychological investigation; here it must be sufficient to suggest that the perception of depth arises from our experience of motion, both of our own bodies and of other objects, within a spatial field which is originally bidimensional only—a field extended *i.e.* to right and left, upwards and downwards; depth or volume is thus originally absent.* Nonetheless this bidimensional area is extension; and as soon as it becomes experienced in association with bodily motion it provides

* *Cf.* below, p. 223, on the interpretative aspects of perception.

all that is necessary for the still more complex percept, tridimensional space.

For bodily motion is associated with the increase of some parts of the whole dimensional field and the simultaneous decrease of others, while the detailed interrelations between these changes are intricate and obscure. If, once more, this increase and decrease are to be accepted as real occurrences, then they imply the visible disappearance and reappearance of objects which the other modes of sense-experience show to exist continuously and invariably. It is probably upon this mass of contradiction and perplexity that the mind's insistent demand for unity and order first of all operates; and its activities result in the discovery that the original bidimensionality is merely apparent—is the appearance or aspect of a really tridimensional volume. In this fundamentally important advance we are most materially assisted by the muscular efforts both of the limbs and of the whole body, which directly or "intuitively" * reveal to us the difference between movement in a two-dimension plane and that in a three-dimension volume. The original experience of bidimensionality of itself provides all the factors requisite for the visual perception of three dimensions. These factors are extension itself, together with the various directions of extension. Originally these directions are upwards and downwards, to right and to left; in these bodily motion occurs, while it also occurs—and here the muscular experiences are peculiar and distinctive—in a manner which, taken together with all the associated visible changes, can be finally interpreted only as "backwards" and "forwards". In more general terms, spatial experience is ultimately systematized by the discovery that extension is continuous in an additional third dimension which is uniquely characteristic of depth

* The word is here used in its usual sense, not with the special meaning of Alexander and Kemp Smith; and then it must be noted that there is nothing which absolutely discriminates such "intuition" from perception and inference. The effectiveness and scope of intuition always depend solely on the degree of simplicity of the nature of any given content; throughout it is a question of complexity with its resultant difficulties.

or volume ; for only thus can the persistent spatial properties of things be harmonized with their incessant apparent areal increase and diminution.

There is in this suggestion no fundamental philosophic difficulty. For no entirely fresh factors are called for at any stage of the advance ; there is never anything more than an expansion of earlier experience—the recognition that the primary continuity of space in two dimensions extends, in precisely the same manner, into a third ; and finally, that these three dimensions are essentially alike in their nature, so that the first or second may become the third, and *vice versâ*, in accordance with the observer's position or point of view.

6. Berkeley's familiar principle therefore " that distance of itself, and immediately, cannot be seen ",* can be accepted only with substantial qualifications. His definition of distance is in the first place too limited ; it is " a line directed end-wise to the eye ", and thus it excludes all those intervals in bidimensional space which must undeniably be " immediately seen " if we are to have any experience of space at all, and which are, both geometrically and practically, " distances " equally with those extending into the third dimension. Moreover, it is only from these primary bidimensional distances that the idea of " end " can ever be obtained ; so that " a line directed end-wise to the eye " can mean only a line that has first actually been immediately seen in bidimensional space, and is then regarded as being deflected, no longer in that space, but into an additional dimension that is continuous with and inclusive of this. Further, the third dimension can easily, by appropriate movements of the observer's body, be seen to be itself an instance of the primary two-dimensional extension, so that each dimension alike is simply one aspect of spatial volume as a whole.

There is here involved, obviously, an important element of interpretation and inference. But this does not imply that the final complex result is removed from the sphere of sense-experience into another of pure suggestion and

* *New Theory of Vision*, vol. ii.

conception. For *all* perception is interpretation—the correlation and unification of the immediately sensed qualities of physical reality; and the perception of depth, delicate and complicated though it is, is very largely the interpretation of immediately * visible data—of extension, motion, light intensity and shading, and double and single images. Berkeley's conclusion therefore that "distance is in its own nature imperceivable . . . neither distance, nor things placed at a distance, are truly perceived by sight"† is true only if it means that vision must always be supplemented by tactual and motor experience, and that "distance" is given the narrow geometrical meaning of a line at right angles to the centre of the eye.

To this it need only be added, consistently with my earlier reference to Bradley's treatment of feeling, that while all these visible data are originally "felt", none of them is simply pure "feeling" in any subjectivist sense, except of course in the case of hallucination.

Nor do I regard "voluminousness" or "extensity" as being actually characteristic of all sensed contents without exception, as James and Ward appear to do.‡ So far at least as space, whether empty or occupied, is concerned, extension is primarily visible and tangible, although experience here may be developed from a prior level whose content is an undifferentiated extensity. I am glad to find this view advocated also by Kemp Smith. "Extensity being always three-dimensional," he maintains, "I fail to discover in my own sense-experience the existence of any such flat field." §

The recent developments of the Theory of Relativity

* Or "intuitively"; *cf. ante*, pp. 221, 222 n.

† Sectt. xi, xlv.

‡ "This element (voluminousness, varying vastness), discernible in each and every sensation" (James, *Principles of Psychology*, vol. ii. p. 135. Ward, *Encyclopædia Britannica*, article "Psychology", sect. 16: "Characteristics of Sensation"). The quantitative are Intensity, Protensity, Extensity. Since writing the above, I find that the suggestions here advanced appear to have a sound basis in recent physiological research. *Cf.* Elliot Smith's *Evolution of Man*. chap. iii, "The Human Brain"; this seems to be an instrument whose purpose is the direct consciousness of depth or solidity by vision from the beginning of individual experience.

§ *Prolegomena to an Idealist Theory of Knowledge*, p. 51; *cf.* also p. 111.

have an important bearing upon the meaning of " space ". For the physicist no longer regards " pure " space as being absolutely empty ; it is a plenum rather than a vacuum. It is obvious that extension can be of interest to the physicist only as the field within which physical phenomena occur, and as containing the medium by means of which the transmission of energy takes place. But Einstein appears to identify this medium, whether it is the old ether or not, with space itself as such. " Space is endowed with physical qualities ; in this sense there exists an ether. Space without ether is unthinkable ".* Scientifically, of course, this standpoint is quite legitimate ; " space " becomes the extended medium of energy transmission. " As soon as the qualities of space are made to depend on the presence of adjacent portions of matter, it ceases to be pure space and becomes an interconnecting medium with physical qualities." † But in two respects the philosophical problem remains unchanged. For so far as perception is concerned this medium is wholly indistinguishable from space in its earlier nature and meaning ; the question therefore of its real existence—of its subjectivity or objectivity—can be decided only on the same grounds as hitherto, since the content and conditions of perception continue to be precisely the same. Further, even if space is essentially a physical entity, still its extensive quality may be abstracted from its other attributes in two respects—first as being its only actually perceptible property and as therefore the object of epistemological inquiry, and secondly as the subject-matter of geometry. If then space proves to be identical with ether, it nevertheless remains, for perception, empty or unoccupied.

7. But with regard to matter the conditions are wholly different. Parts of space are visibly occupied by objects having their own definite and more or less permanent characteristics, and in this way markedly distinct from the spatial areas they fill. Further, these visible objects move or even disappear, while the space remains totally unaffected

* *Sidelights on Relativity*, p. 23.
† Sir J. Larmor, *Nature*, vol. 115, p. 419.

by these incessant changes ; finally, this mutually exclusive occupancy speedily comes to be invariably signified by tangible resistance. Even therefore if tangibility were nothing more than a subjective element, it would nonetheless possess an inherent objective reference—it would still imply visibly occupied space. So far as naïve realism is at all systematic, this would seem to be its ultimate practical standpoint. Space is occupied by things, and the thing is either the unity of its perceived and perceptible qualities,* or it is the imperceptible " substance " which underlies and possesses these.

The specifically scientific or philosophic concept of matter is the outcome of still further development, and obviously presents, in many of its aspects, a close relationship to the quasi-reflective idea of objects or " substance " which is sufficiently explained by its history. Here then our crucial problem takes its finally definite form. In what sense, if any at all, is matter real ? Is it anything more than a methodological concept, introduced (consciously or unconsciously) in order to simplify and systematize scientific theories and calculation—a mere device, in short, to economize thought ? If we regard matter as objectively real, are we only hypostatizing this abstract concept ? As real, again, what are its relations to perceived qualities ? Is it identical with the totality of these, or with a certain number of them which we regard as primary ? Or is it a real entity existentially distinct from these ?

Philosophically, I regard the last affirmation as being true ; but it must be based on the principle of the objective reality of space. Space then is a visible non-mental real ; we see, immediately and directly, empty or pure extension.† Extension must then be regarded not as a property of space, but as being identical with it ; at the same time it is a property of colours and of things, inasmuch as, while markedly distinct from pure extension in virtue of their positive characteristics, persistent definiteness, and capacity for motion, these always occupy space and, in that sense, possess extension. In other words, there is no distinction

* *Cf.* here Baillie, *ante*, p. 196. † *Ante*, p. 212.

whatever between space and extension, while colours and things have attributes additional to extension, and are therefore different from space in itself.

Allied with the visibility of extension is our tactual experience of space. We are unable, in my opinion, to feel space tactually. All that we can feel is muscular effort and tension, bodily position, and bodily movement, together with the resistance offered by objects which visibly occupy space, and their other effects, such as heat and cold, upon the organism.* Visible occupancy and resistance are thus two wholly disparate contents of experience, which nevertheless speedily become almost inseparably associated, to such a degree indeed that resistance and space occupancy finally become synonymous, in the sense that they become alike and equally significant and descriptive of the existence of matter and its relation to space. On the other hand the phenomena of mirror reflection prove that visible occupancy is dissociable from, and therefore not identical with, resistance ; but for this simple fact it would seem inevitable that the fusion between resistance and extension would be much closer than it actually is, and the difficulty of their theoretic distinction much greater. At the same time, once this association between the tangible and the visible contents has been formed, the relegation of mirror images to the sphere of appearance, allied with the variability of visible contents relatively to the constancy of the tangible, results in the acceptance of the former as being the properties of the tangible thing, or " substance ". Thus tangibility and tangible resistance themselves become synonymous with space occupancy.

While therefore it is undoubtedly of the utmost importance to insist upon the disparateness of the content thus revealed by visual and by tactual experience respectively, this is only part of our task. For this disparity is discovered by analysis, abstraction and contrast ; but these processes must not be permitted to overshadow the significance of the actual association in experience between what is seen

* This is I think sufficient as a general statement, apart from psychological minutiæ.

and what is felt—an association so intimate and invariable as to simulate fusion, so far as practical life is concerned. It is certainly necessary to analyse experience, and to discover the various factors operative therein together with the contents with which these are concerned. But it is equally necessary to consider, and so far as possible to explain, the significance of the close *combination* of these different activities. For it is after all this combination or co-operation that constitutes the most important characteristic of perception—not the mere fact that it includes disparate elements ; and recent psychology seems to have laid so much of its emphasis upon the complexity of the perceptual process, and upon the contrasted nature of its constituent factors, that their combination or fusion into one unitary process—the main feature of the whole situation—has been unduly ignored. But when we turn from the consideration of the contents of visual and of tactual experience as separate from, and as independent of, each other, and view them in the light of the contribution which each makes to its fellow within actual experience, then we find that they yield the consciousness of matter as a real existent.

For each supplements the content of its allied function with a wholly disparate content which, in spite of this disparity, becomes fused with its fellow into a single complex unit. In this way the visible object, visibly occupying space, is found to be also resistant—a quality which vision alone can never discern except in the secondary sense of exclusive occupancy ; * and similarly, the tangibly resistant acquires visible spatial localization—it is felt precisely within the visibly occupied space and never outside this. This ultimate result is of course the outcome of " association " ; but it is nonetheless reliable and veridical ; and it is wholly illogical to decry " association "—to describe it as " mere association "—because a small minority of its consequences prove to be illusory. The same objection may obviously be urged against every mental activity alike—against thought and emotion and religious experience ; and if the perception of things as at once visible and resistant

* *Cf. ante*, p. 214.

is to be regarded as questionable because it is based on association, the very basis of all experience at once becomes undermined, and the only possible result is an absolute scepticism or pure subjectivism.

Space is thus one form of non-mental objective reality; and that which visibly occupies space, and is at the same time resistant, is another form which, still further, must be regarded as physical—the seat or source of force and energy; whether or not pure space is also physical is a subordinate point which science must decide. This space-occupying and physically resistant real, I would suggest, should be called "matter"—a distinctive name for a unique form of real being. For while it is true to say that we tactually feel resistance, still this is a general term, and it is more precise to say that we feel resistants; the resistant then is matter, directly perceived in tactual experience. But it is at the same time always perceived as visibly localized; and to ignore this complex unity of perceptual experience is to miss the central feature of the whole situation.* The term "resistant" however must be interpreted wholly objectively, in the sense that material things not only resist our bodily movements within the space they occupy, but also exclude from that space all other things; our bodily feeling therefore is but a secondary aspect—only one special instance—of this universal objective character. Our consciousness or perception of resistance, in other words, is undoubtedly based on feeling; but as I have already argued with reference to Bradley's treatment of feeling, this cannot mean that the resistant itself is identical with feeling.

Tactually therefore we perceive the resistant and tangibly extended; and this itself is matter. For though we have here three different terms—resistant, extended, matter—there are not three distinct real entities. There is but one

* The perceptive activity of the congenitally blind is of course extremely suggestive in this connection. But it is obviously a fundamental limitation of normal experience, with which theory must in the end be concerned. Apart therefore from the patent difficulties of its correct analysis and interpretation, it must not be allowed unduly to influence our conclusions, as it often seems to me to do.

real—matter; but matter is dually related. In the first place, it is related to pure space, and in this respect it is extended; secondly, its parts are related to each other as mutually resistant; and these facts would still remain unaffected even if it were proved that they are the results of the attractions of electrons; for our theory of perception must deal with actually perceived objects and not with their imperceptible elements, equally real though these must be. Accepting space therefore as itself objectively real, our experience of "the resistant and extended" at once implies another real which is related to space itself and also interrelated as between its own parts. While therefore we directly experience matter tactually, we cannot—if we speak with due literalness—see matter; just as, conversely, we cannot feel pure space.* We see only the visible properties of matter, although at the same time these are so inseparable from matter that a looser phraseology would permit the assertion that we see matter itself. From this standpoint matter, or material or physical substance, is an objective reality immediately perceived. It is neither an unperceivable noumenon, nor a hypostatized concept, nor a Lotzean intelligible but non-spatial real which somehow manifests itself within experience as extended.†

This conclusion, whose concordance with the principles of Direct Realism indirectly confirms that theory, does not conflict with the scientific theory of the minute structure of matter. For it would in principle apply equally to atoms and electrons, provided only our senses were competent to perceive these. Except in magnitude, the primary properties of an electron are identical with those of a pebble; ‡ it is not the inherent nature of the atom, but simply the limitation of human faculties, that places it beyond touch and vision. But if space (as Einstein maintains) has physical properties, and if electrons are modifications of this space, then the disparateness between pure space and resistant matter will disappear; there will be but one physical real manifested under two different modes.

* *Cf. ante*, p. 227. † *Metaphysic*, vol. i. p. 263.
‡ *Cf.* Whitehead's and Soddy's position, *ante*, p. 60.

There still remains to be considered the problem of our apprehension of the parts of space in their relation to space as a whole—a subject which we found to hold a prominent position in Kemp Smith's theory. But the present chapter is already so long that my remarks on this point may be deferred to the succeeding chapter on Time.

CHAPTER XVIII

A REALIST THEORY OF TIME

1. The discussion of the nature of Time * is frequently distorted from the outset by its being isolated so as to be regarded as a separate and independent entity which is capable of being investigated purely in its own character ; and in this respect it makes no difference whether it is described as objectively real or as subjective or phenomenal. Only from the scientific standpoint, however, is it possible to adopt this attitude, as in mathematics or certain departments of physics. But it is altogether impossible philosophically ; for science must always deal with abstractions, and nowhere more than in dealing with Time and Space. When therefore this scientific procedure—in itself of course quite legitimate—is introduced into philosophy, the inevitable result is that our inquiry becomes committed to the futile task of hypostatizing an abstraction ; and as soon as this becomes recognized the course is reversed, so that Time then becomes purely phenomenal or even subjective. These familiar results, however, are but the natural penalties of the failure to consider Time and Reality in all their essential aspects—an inescapable tendency of the modern intellectualist atmosphere. For, as I hope to show in the sequel, the question—What is Time ? is actually equivalent to asking—What is Reality ? the answer to one being also the answer to the other.

I shall begin my own analysis by discussing the relation between the experience of Time and that of its parts or subdivisions ; but for purposes of convenience I shall treat

* In this chapter I shall employ " time " to denote perceived time ; and " Time " as referring to the whole of time, or all time, or time generally. Similarly for space, number, *etc.*

of this in terms of Space. For this relation in itself is equally characteristic of number, quantity, magnitude, series, and order or system in general; and it will be recalled that Kemp Smith maintains that "the Space which we sensuously apprehend, be it large or small, is always apprehended as falling within a Space larger than itself, and as being conditioned in its existence by this wider whole . . . spatial limits can be known only through a consciousness which *from the start* apprehends each of them in a wider unitary setting". Against this I have argued that it implies that no space whatever can be apprehended until the whole of Space has been apprehended;* and as I have already indicated, this applies equally to number, magnitude, *etc.*

For we must here draw a distinction which Kemp Smith has ignored. It is undoubtedly true that our *knowledge*, or conception, or thought, of space is always thus characterized by the knowledge of a more inclusive space; but on the other hand it is not true that all our sensuous apprehension of space, "from the start", is thus conditioned.† On the contrary, space is sensuously apprehended or perceived first of all as being of a certain area (or volume) and no greater; and this fact is not affected by parts of this area being apprehended as definite while the remaining parts are indefinite or marginal—there is still always a cessation or termination. It cannot be argued against this that what we are really conscious of is a "limit" or "boundary" which, simply because it is a limit, at once implies an outer and continuously inclusive space. For my point here is that no such consciousness of a "limit", in this specific sense, has as yet been developed; there is merely the consciousness of the given area or volume, and nothing whatever more. Even when, owing to the incessant movements of the eyes,‡ the perceived area changes, this merely means that its confines move and include a varying content, but do not themselves disappear; it must be remembered, further, that at first it is never empty space that is appre-

* *Ante*, p. 103. Similarly for Time.
† On the sensuous awareness of time and space, *cf. ante*, p. 26.
‡ Or limbs.

hended, but space together with objects or colours which make up a more or less definite totality; and thus the problem arises as to how our final concept of Space as a continuous totality is developed.

Although the full psychological detail of its evolution is undeniably intricate it is unnecessary to appeal to any special faculty of "intuition" any more than in the case of other concepts. The influence of image formation, retentiveness, similarity and primitive memory suffices to explain the association of separately perceived spaces into an ever enlarging totality, which the higher forms of ideation enable us to comprehend as also continuous. For it must here be recognized that a long course of simple experimentation, quickly lost sight of in the mist that enshrouds infancy, must be undertaken before this essential continuity of space can be ascertained.* This experience does not descend upon the mind like a *deus ex machinâ*, or exist therein as an *a priori* "intuition"; it rather arises by successive stages which are slowly fused into a single whole by primary abstraction and comparison.

This fact can be much more easily realized, however, in the analogous case of numbers, which bear obvious resemblances to space and time. For the primal consciousness of numbers is not conditioned by any "intuition" of Number; on the contrary, numbers are first of all apprehended as simple and separate, to such a degree indeed that many savages have no knowledge whatever of any but the lowest integers. Here the process of mental development has clearly been arrested at a stage corresponding to one which also occurs during the primitive experience of space, but which is far more rapidly transcended. It may, however, be the case that the higher animals, and imbeciles or extremely stupid persons among human beings, stand with regard to space on the same level as do savages with reference to number—they may be wholly devoid, that is, of any apprehension of Space as a continuous totality.

But there also operates, together with the activities

* It can readily be observed, I think, in the play of very young children and animals—*e.g.* puppies and kittens.

just referred to, a further factor of yet more fundamental importance. This is the incessantly repeated perception that every space is divided, by its various included objects, into smaller spaces; and this simple fact of direct experience,* once it is specifically attended to, is found to occur without exception, and also, in thought, possibly without limitation. It must here be noted that it is never the *expansion* beyond itself of any given space that is thus directly perceived, but its *divisibility*; and with this is associated its observed internal continuity. The uninterrupted experience of these two characteristics plays by far the largest part in the gradual creation of the concept of Space as a continuous totality. For the patent fact that every perceived spatial division is a part continuous with a wider inclusive area or volume inevitably suggests the idea that all space, without exception, is likewise a part—an idea which is readily confirmed by simple experiment, and naturally expands into that concept of Space as endlessly infinite and endlessly divisible which conditions all developed perception.

The evolution of this particular concept is therefore first of all thoroughly *a posteriori* and not, as has so often been held, and has also been maintained (in a certain sense) by Kemp Smith, in any literal fashion *a priori* at all. Further, it is only one instance of a fundamental principle which controls the evolution of experience in general, manifesting itself equally in the apprehension of Time, together with the analogous entities referred to at the beginning of the present chapter. For in all these cases alike their original actual *a posteriori* character rapidly *becomes converted* into the *a priori*, in accordance with that universal relation between these two categories expressed by Bosanquet as follows: "the *a priori* is merely what comes clear and connected out of the mass of the *a posteriori*".† Times, spaces, numbers, magnitudes and a

* It is absent in the awareness of numbers—their fractional subdivisions are never so easily discernible as are those of spaces; this is one reason why the antinomies of Number and Series are less obtrusive than those of Time and Space.

† *Implication and Linear Inference*, p. 127; *cf.* below, p. 261.

few other allied characteristics, in other words, are so universal within all primitive consciousness—are so regularly and frequently experienced—that they speedily become organized into systems or orders which then constitute as it were the basis or background of the whole of consciousness, and in this way assume that *a priori* aspect so often erroneously described as "innate", or "inherent", or as essentially super-sensuous. This transformation is further accelerated by the relative simplicity which these schemata always present to ordinary unreflective observation—a simplicity which is, of course, merely apparent or superficial, but which at the same time can be penetrated only with the difficulty that attends all mathematical investigation. This progressive change from the *a posteriori* to the *a priori*, however, is by no means confined to space and its allies; it is rather, as Bosanquet's statement implies, universal within all systematically developing experience, and is perhaps best illustrated in the contrast between the beginner's knowledge of any subject and that of the expert; for, quite plainly, much that is *a posteriori* to the former has for long been *a priori* to the latter.

2. Although I have expressed these phenomena in terms of space, precisely the same principles control the development of our idea of Time. There must now be considered the still more difficult problem of its nature; and this must begin with the question, What is it that we actually perceive when we perceive a given time? for it is from this perceptual content that our ultimate concept is attained. In dealing with perception, and not with that more primitive experience which I have just discussed with reference to space, the answer which first suggests itself seems sufficiently clear: We are distinctly conscious of a portion—amount—quantity—of an entity which we regard as really existing, but which extends beyond, and so includes, the time which we perceive, in a way precisely analogous to our awareness of a part of Space. The significance and validity of this experience have now to be analysed; and we must begin by noting the important distinction between a given perceived time, in itself and as such, and its beginning and end. It is

of course obvious that time and its limits are apprehended as inseparable elements of one complex content. But this is merely an alternative statement of the fact that every time is divisible; and the essential point is that the limits of a time are distinct from the time they include. Too often this distinction is ignored, or at least only confusedly expressed, as has recently been evidenced in the philosophic consideration of the Theory of Relativity. It is therefore not sufficient to say that a time, as such, is the relation between its beginning and end, just as it is insufficient to describe a perceived space as the relation between two points and nothing more.* This is certainly true; but it is neither the complete nor the essential truth; and to insist upon it as being such is to confuse the entire issue.

Thus a time (or a space) is distinct and different from its beginning and end; and this difference can be clearly apprehended and attended to. Most usually, indeed, it is the time that is actually observed and not its limits; these latter are then secondary and subordinate to time—a fact expressed in the common saying that every time "has" a beginning and an end. What we are predominantly conscious of, in ordinary experience, is thus the Time and Space within which we ourselves and other things exist. Of these entities all perceived times and spaces are regarded as parts or elements; and it is only on special occasions and for specific purposes that the limits of a time or a space are ever attended to; times and spaces, in other words, are primarily existents or entities in their own right as it were, and are relations and limits only secondarily.

On the other hand, these relational aspects assume an almost exclusive importance in all scientific inquiry, as also in that quasi-scientific experience which forms so prominent an element in modern civilization. But this must not mislead us into confusing these limits and relations with time and space themselves. Such an erroneous identification has profoundly vitiated much of the recent discussion

* Or between certain lines or boundaries; in each case the principle involved is the same.

of the philosophic aspects of Einstein's theory; while the mathematicians and physicists, on their part, are so engrossed with the exact *measurement* of intervals of Space and Time, rather than with their *nature*, that they have come to regard the two terms as denoting the dimensions of these intervals, rather than the more fundamental entities themselves, in whose existential character and status they are but little concerned, since they accept their real existence, in some mode or another, as the subject-matter of their own special inquiries.*

But if the actual issue here is only stated with due precision it is sufficiently clear. For current scientific terminology describes spatio-temporal limits as being, not " space " nor " time ", but " points of space" and " instants of time " ; and thus once again, as in the popular phrase that time and space " have " these limits, we find them subordinated to space and time themselves. The question then arises as to the existential status of these limits—what place they hold, or what function they perform, within our complex spatio-temporal experience. The answer is that they fulfil a dual function—they are associated with the existence of objects and events which are of interest and importance, and they also serve to measure the extent of space and the duration of time.† But in both respects alike they illustrate the essential difference between themselves, *as limits*, and time or space. For so far as they can truly be said to exist at all, the point is *within* space and the instant *within* time. Apart from this essential inclusiveness and subordination, neither term has any real meaning;

* I may refer to my articles on this subject in *Mind*, vol. xxxi. pp. 40, 337, and add that my general conclusion agreed with that of Bosanquet: " the moral of relativity is not the permeation of the universe by mind or minds " (*Meeting of Extremes*, p. 16); on Einstein's use of " space " and " time " to denote " space interval " and " time interval ", see his *Theory of Relativity*, p. 30.

† The word " duration " has recently acquired a special meaning of its own, both in Bergson's philosophy and in the work of Whitehead, Alexander and Kemp Smith. The distinction, however, is of little value for my own purpose, and I shall use " duration " and " time " as practically synonymous, in the sense that to say " an object or process endures or has duration " means that it " occupies time " ; a " duration ", again, is a " time interval ", as in the passage above ; and since all time can be subdivided and measured, all time has " duration ".

they are abstractions from our immediate concrete experience of time and space as such ; and it is therefore impossible, except from the standpoint of extreme mathematical abstraction, to regard time and space as composed or made up of points and instants alone, or even as nothing more than the relations between these. This view is perfectly legitimate in mathematics and its allied sciences ; but to emphasize it as primary and fundamental is to ignore the actual development of experience from the concrete to the abstract, and so to substitute the final results of reflective thought for the original content of perceptual consciousness —it is, in short, not only to put the cart before the horse, but still further to confuse the order of Nature by insisting that the cart *is* the horse and *vice versâ*. It is unfortunate that this unnatural attitude has been adopted by philosophers ; for the scientific exponents of Relativity employ instants and points as the limits of spatio-temporal *intervals*, and then proceed to argue that it is our *measurements* of these intervals, and not time and space themselves, which necessarily vary with the velocity of our respective systems of reference ; the ontological nature of time and space thus still remains an open question so far as they, and the theory, are concerned *—a question, further, in which they are but little interested.

The philosophic standpoint, however, is completely different. It regards the scientific results of the inevitable relativity of all our spatio-temporal measurements, profoundly important as they are, as nevertheless subordinate to the nature of space and time as such ; and the distinction between these two entities on the one hand, and points, instants and their dimensions on the other, must be rigorously maintained. As for the manner in which this distinction is obtained little need here be said ; the problem centres in the main on those psychological processes of selection, abstraction, comparison and contrast which,

* " The principle of relativity does not destroy the possibility of correlating different local times, and does not therefore have such far-reaching philosophical consequences as is supposed. The one all-embracing time still underlies all that physics has to say about motion " (Russell, *Our Knowledge of the External World*, p. 104).

originating in ordinary perception,* are then carried to the extremes of scientific precision and delicacy. Here I need further refer only to the second aspect of the function performed by spatial points and temporal instants—the first (the measurement of intervals) having just been dealt with; and the other turns on the concrete contents or objects of experience, and the varying degrees of attention which these arouse.

For, except in mathematical abstraction, a position or point is always occupied by some perceived content, and the instant marked by some perceived phenomenon; and it is primarily those objects and events which arouse interest and absorb attention that are selected as the indicators of the purely spatial point and the purely temporal instant. This is true equally of the course of ordinary life and of the delicate sound and light signals of scientific experiment—it is these percepts that really fixate attention and so become the indispensable landmarks of the entire sphere of investigation.† But, philosophically, these perceived objects and phenomena are of still more fundamental significance; for it is only by elucidating their general relations to consciousness that the true nature of Time can be ascertained and expressed.

3. I have just observed that perceived time has a quantitative aspect—we are directly conscious of a certain amount of time, in exactly the same way that we are aware of a certain extent of space ‡; and this description of our experience proves to be sufficient until the phenomena of change come to be analysed. Ordinarily, however, we recognize no difficulty here, and the perceived facts of change appear to harmonize with quantitative time. But as soon as it is distinctly realized that continuous change

* The importance of this level of conscious experience, too much overlooked in modern scientific inquiry, at once comes to the fore in the psychology of insects and the higher animals.

† I have already alluded to the importance of the perceptual basis of modern science (*ante*, pp. 27, 65, 76).

‡ This principle is not affected by the fact that these aspects are to begin with crudely or indefinitely quantitative. This qualification means only that the pure concept of Quantity develops *pari passu* with those of Time and Space.

really implies the cessation, and the beginning, of existence, it is clearly seen that to attribute quantity or actual duration to *perceived* time is to identify existence with non-existence —the present with the past and future ; and whether this refers to time itself, or to objects and events, makes no difference to its illogicality. It is however unnecessary to add anything further to the already prolonged discussion of the " specious present ". I need only express my own acceptance of the conclusion that the quantitative or durational aspect of *perceived* time is illusory ; perception, in other words, does not directly reveal the real nature of time ; in this respect there is a profound contrast with our perception of space, which does directly reveal its actual nature.*

But not only is it true that perception *does* not directly show us the true nature of time—it is still further true that it *cannot* show this. For the very conditions of experience make this wholly impossible ; and the same conditions also render it impossible for us ever to free ourselves from this perceptual illusion ; we are thus compelled to accept it in actual concrete experience, even though we may be philosophically quite convinced—as Hume was in other respects—of its illusiveness.

An illustration may make this perplexing situation a little clearer. Our perceptual consciousness of time resembles the visual experience of a person who sees objects only in a mirror, but who is also quite unconscious of the existence of the mirror and who therefore accepts the reflected images as being real things. In the same way, perceived time is not real Time ; and yet it is unreflectively regarded as being real, just as the mirrored objects are necessarily regarded as the actual things ; † further, only introspection and reflection can detect the illusion and its deeper meaning, in the same way that the mirror and its

* This however need not mean its complete nature. Tridimensional space may be non-Euclidean ; and higher dimensional space may really exist. *Cf. ante*, p. 97, note 3.

† But this does not imply that perceived time is a reflection of real Time. The essential point of my illustration is just the illusion itself, not its *modus operandi*.

significance could be discovered only with deliberate effort. Finally, as the reflections reveal the properties of the real things, so perceived time enables us to apprehend its real nature. Thus two questions arise—What is the basis of this perpetual illusion ?—of the specious present ? and how can we discover therefrom the true nature of real Time ?

I have just observed that its cause lies in the very conditions of perceptual experience ; more precisely, it is to be found in the nature of psychic images, and in the relation of these to sensed content, as sensed. Throughout perception there is present in the mind an ever varying multitude of images, each of which is the immediate successor of some element of sensed content ; * and in my earlier chapter on the nature of images I have insisted upon their profound existential differences from sensed content itself. But despite this contrast, the earliest formed image is related to its originative sensed element in two fundamentally important respects—(*a*) it very closely resembles this element, and (*b*) in virtue of this resemblance, it sustains our continuous consciousness of and attention to the sensed content. This constitutes its *logical* function, as distinct from its psychological nature ; † and in ordinary experience its psychic character is so completely overshadowed by its logical significance that we very rarely become explicitly aware of image content as such, because consciousness is completely monopolized by the real existents which it signifies. If now we conjoin to these facts the steady decrease in the psychic intensity of the vast majority of images, we are enabled to unravel the complexity of our perception of time and to discover some indications of Time's actual character.

The issue turns on the distinction between what we are conscious of, and what actually exists. In accordance with my general realistic standpoint, we perceive real existents ; and perception is always conditioned by the coexistent complex of representative and significant images

* I do not here maintain that (conversely) every element of sensed content is succeeded by its image ; whether this is the case or not is here irrelevant.

† On these two points *cf. ante*, pp. 183, 189.

which form part of the content of the mind.* These images, in the first place, vary enormously in their psychic intensity, vividness, or impressiveness, from the after-image, which possesses an intensity but little less than that of sensed contents, to others that are on the verge of disappearing.† But still further, these images fall into two great groups or divisions; the first division contains a relatively small number of images which, though extremely vivid, are still rapidly *sinking* in intensity, together with a large number of others whose slight vividness has sunk from a similarly high level; the second group consists of a small number rapidly *rising* in intensity, together with others whose impressiveness will attain the highest level. There are further differences between these two groups, such as in their extent, definiteness and interest; but here the sole essential point lies in the distinction between their respective intensities as *rising* on the one hand, and *falling* on the other.

For, with this distinction in mind, we must now theoretically isolate the most vivid of these images, and observe their intimate association with sensed content. The complex organic and psychological causes of this association are here irrelevant, since we are concerned only with their final results within experience; and these results are twofold. In the first place (to repeat) the psychic intensity of the images in question closely approaches that of sensed content itself; secondly, all these images represent, or indicate, or signify, sensed contents of one kind or another. The inevitable consequence of these conditions is that, in ordinary experience and apart from some such analysis as the foregoing, we incessantly *confuse* the content actually sensed with the associated images of highest intensity; all these different elements are thus apprehended as one whole, so that the distinction between sensed factors and image

* " Psychical matter in a mind ", to repeat Bosanquet's description, *ante*, p. 194.

† It must be noted that " intensity, vividness and impressiveness " are here psychical, not logical; they are relative, *i.e.* to the intensity of actually sensed content, not to the logical clarity or definiteness of an idea. This distinction is too frequently confused,

factors is never discovered until deliberate introspection is undertaken.* But here it must be recalled that sensed content—apart from " appearance," illusion and hallucination, already sufficiently considered in my earlier theory—is always existent reality ; while images, in being always significant of sensed content, are therefore always significant of the same reality ; and this means, once again, that we become conscious, not of these images *as* images, but rather always of real existents.

But a further fundamentally important consequence must be observed. For it necessarily follows from the foregoing coöperating conditions that the actually sensed characteristics of reality are associated continuously with its simultaneously vividly imaged characteristics, while at the same time it is never realized that these latter *are* imaged ; for they, too, are regarded as being sensed.†

Further, these images fall into the two groups marked by sinking and rising intensity respectively ; but this rise and fall again are regarded, not as what they actually are—attributes of *image content*—but (since these images as such are never apprehended) as additional and essential characteristics of real existents : the fall as their passing gradually away into the past or into non-existence, and the rise as their emergence out of the future which, as future, is similarly non-existent.

Finally, distinguished from both past and future is the present—actually the " specious present "—filled with (or occupied by) existents that are fully real together with others on the verge of passing away or of coming into being, and so continuously extending into future and past. This account, of course, may be elaborated into much fuller detail ; but it is a sufficiently accurate description of ordinary perception for my immediate purpose ; and it explains

* An illustration of this, sufficiently familiar to psychologists, is afforded by those ingenious advertisement posters in which only certain outstanding portions of the human figure, *etc.*, are actually depicted, the missing details being then immediately, but unconsciously, supplied by imagination. Allied with these are the stock staircase diagrams of text books.

† At this point I may again refer to my earlier illustration of the mirror illusion, *ante*, p. 241.

how it is that the succession of images, culminating as it finally does in the generation of concepts having an essential and inherent logical significance, creates that wholly different entity, the idea of succession.

4. It is obvious therefore that there is always a profound difference between the actual temporal characteristics of reality and the aspects which these assume in perception.* We perceive events and objects first of all as continuing—enduring—persisting—in a directly apprehended present, and secondly as inseparably associated with others which possess a kind of phantasmal existence in a ghostly past and future. For it must be noted that in spite of its quasi-reality, existence in both past and future is an indispensable factor in maintaining our perceptual understanding of the present; and in this respect we are always more or less conscious of an unresolved contradiction in our ideas of a past and future (with all their content) which we vaguely feel *must* exist in some way or other, but which we also know *cannot* really exist—a conflict which finds expression in the familiar phrase, " the insoluble problems of space and time ". This practical attitude towards Time again finds a firm basis in the indissoluble connection between our purely temporal experience and our spatial. For we constantly find (as in walking along a road, to take a simple instance) that what lies before us in time is inseparably associated or fused with what actually exists before us in space, and the content of past time with that of passed space; and the result is that inescapable interpretation of Time in terms of Space which constitutes so prominent a feature of the entire problem. Still further, the profound influence of past and future upon all our activity confers upon these an apparently indubitable reality.

But the analysis of the psychologist agrees with the investigation of the physicist in revealing the perceived present as specious,† and the contents of past and future

* *Cf. ante*, p. 242: " the distinction between what we are conscious of, and what actually exists ".

† The well-known variations in the estimation of the duration of the specious present are due in part to the different amounts and intensities of the vivid image content in the observers' minds

as equally non-existent and therefore existentially unreal. What actually exists is firstly a multitude of images which are simultaneously existent with each other and with sensed content, and secondly the also simultaneous properties and characteristics of the real world, of which sensed content forms an infinitesimal—though nonetheless real—part.* Whitehead's recent description of real existence is on this particular point somewhat confused, because his definition of " nature " at once prevents its application to reality in its temporal aspects ; so far as Time is concerned, that is, nature and reality in Whitehead's theory fall apart and exclude each other.†

For nature is defined as being " that which we observe in perception through the senses ", and as such it is the content of " specious presents " within which there are " antecedents and consequents ", which thus result in " temporal thickness " ; " what sense-awareness delivers over for knowledge " therefore " is nature through a period ". On the other hand, " there is no such thing as nature at an instant posited by sense-awareness . . . nature at an instant is not itself a natural entity " ; instantaneous phenomena, in other words, can never be perceived. Now all this is quite in accordance with Whitehead's original definition of nature as what is sensibly perceived, whence it follows that " in truth there is no nature at an instant ". But at the same time nature is the object of all scientific investigation —" science is determining the character of things known, of the nature which is before us in perceptual knowledge " ; and this includes " molecules and electrons " with all the other analogous entities of modern physics—" each of them factors to be found in nature ". But at this point a serious difficulty arises ; for either Whitehead's definition of nature must exclude a most important part of real existence, or we must regard every real change, in every one of its phases

* The phraseology here must not be interpreted in too atomistic a sense ; for the psychic images, together with ideational and other content, constitute a unitary mind, just as the physical attributes are elements in the real world ; mind and world, still further, form a yet wider whole.

† *The Concept of Nature*, pp. 3, 56, 57, 61, 40, 46.

without exception, as enduring " through a period "—as having " temporal thickness " and as therefore occupying a " specious present ", no matter how short the duration of such a " present " may be. In no case whatever can there be an *instantaneous* real change, simply because all physical reality is included in nature, and there is no " nature at an instant ".

Such a conclusion appears fundamentally erroneous. It is undeniably true that if we adopt Whitehead's *definition* of nature, " nature at an instant " is an impossibility; but it does not therefore follow that *reality* " at an instant " (or instantaneous phases or aspects of reality) is an impossibility. All that is actually implied by Whitehead's exposition is the separation of the terms " nature " and " reality ", owing to the first being too narrowly defined; and the scientific consequences of this severance are too patent to merit further discussion. They can be escaped only by so expanding our concept of " nature " as to include both the content of sense-perception (as Whitehead has done) together with all the temporally instantaneous phases of real existence, so far as reality is dynamically changing; and that the universe *is* incessantly changing is a foundational principle of all science supported equally by psychology and physics.

If then we describe reality in terms of time—if we give special prominence to its temporal character—we must express our conclusion somewhat as follows. The real present is never specious, but literally instantaneous or momentary; but at the same time, owing to those conditions of all our later conscious experience which I have just analysed, it is inevitably perceived as specious—enduring, lasting for a period. The perceived content of the present, together with all its associated content revealed by thought as real though not perceived, is actually one instantaneous phase of incessantly changing reality, infinitely diversified in its simultaneous attributes or characteristics. These instantaneous phases succeed one another with absolute continuity, in the sense that *universal* non-existence never occurs, although many of the constituents of reality cease

to exist.* This principle remains unaffected by the continuous unchanging existence of many reals ; for this merely means that their successive and continuous instantaneous phases resemble one another.

It must be recognized, however, that this is not an exhaustive description of reality, but is restricted to what it purports to be—a description in terms of time. With this there must now be combined its essentially dynamic nature—that character expressed in the scientific concepts of energy, force and motion. Change occurs when the successive momentary phases of reality differ from one another ; but it consists in much more than mere temporal succession which, if isolated from the allied characteristics of real being, at once becomes a partially real abstraction.† Change always implies that each phase of reality brings about its own self-transformation into its successor. This however is true only of reality as a whole ; so that when we consider any real which is included in, and therefore less than, the whole, some of the essential determining conditions of its change always exist beyond itself ; and here we touch upon the difficulties of the principle of causation.‡

At first sight, no doubt, this theory seems to imply that Time does not exist in any literal sense at all. For not only do past and future appear to be non-existent, but even the specious present has been abolished, so that all that remains is a momentary simultaneity of diversified contents ; whence it would follow further that the perception of time is wholly illusory, and all distinction between past and present nothing more than a difference in the intensity of simultaneous images. Time, in other words, would have only one dimension—that of simultaneity.

But this conclusion is erroneous ; for it wholly ignores

* Any further discussion of continuity, as of change and causation (see below) would involve a systematic analysis of all the principal concepts of modern science.

† Obviously no abstraction can be wholly unreal ; if it were it would not even exist in any way. *Cf. ante,* p. 232.

‡ It would be an error to regard this theory of the nature of reality as " cinematographic " ; for the series of film photographs is obviously discontinuous, whereas real processes are essentially continuous, as in the contrast between the exhibition of the film and the developing of one of the negatives

that fundamental dynamic character of reality, in virtue of which each of its simultaneous phases transforms itself so as to generate a different phase, just as it itself was similarly generated. Our concept of reality must therefore be further expanded to include the entire system of these simultaneous phases of the universe.* Each of these is conditioned or determined by others, and itself determines others, in a completely definite way which is expressed in the " laws of the universe "—laws which are intelligible only in terms of this mutual conditioning of one phase by others, and which become the more intelligible the more widely this definite determination is discerned.†

These continuously self-transforming phases, then, constitute a system—the whole of reality ; and this system possesses a fundamental characteristic—it is a series—its phases are successive ; the detailed contents of each phase, on the other hand, are simultaneous. Simultaneity and successiveness are thus two essential attributes of reality, each being as universal as reality itself is. They are therefore discernible at every stage of developed consciousness, first of all as part of the content of the perceived " specious present ", and secondly as objects of thought or conception ; more generally, as contents or objects of all experience.‡ The inevitable consequence of this universality is that succession and simultaneity are among the earliest abstractions that are made by the mind through those analytic processes of discursive thought which result in the attainment of systematic knowledge. As two inseparably united attributes of reality, they necessarily imply each other within experience—consciousness of one therefore is impossible without consciousness of the other ; and thus they become inseparably associated together as the two essential attributes or aspects of Time.

* This term of course includes far more than the material universe, which is only one of its principal subdivisions.

† This view seems to commit us to complete determinism. It is, nevertheless, quite compatible with real freedom, as I have argued in *The Philosophic Basis of Moral Obligation*, chaps. x, xi.

‡ " Contents of experience ", however, has no subjectivist significance ; for in accordance with my realistic theory the content or object of experience is always some part or aspect of real being.

5. Thus the answer to the question whether Time is a reality or not depends entirely on how it is regarded. As I observed at the beginning of this chapter, to ask—What is Time? is implicitly to ask—What is Reality? and the confusion which attends the treatment of the subject is the inevitable consequence of the failure to recognize and develop this implication of our inquiry so as to make it definitely explicit. The truth is that Time is a fundamental characteristic or attribute of Reality, manifested equally as the simultaneity of all the contents of each of its instantaneous phases and as the successiveness of the entire system of these phases. As such—but only as such—Time itself must be real; while on the other hand, to dissociate it from real being is at once to convert it into a partially real abstraction.*

Regarded, then, as an essential attribute of the real dynamically evolving universe, Time must be much more than a mere relation between events or instants. It is rather the basis or foundation of all temporal relations or time-order. But when we isolate different phases—when (as we are compelled to do) we select any of them for some specific purpose—we at once perceive them as before and after one another; or still more definitely, we may observe their definite places within the entire series and express the result quantitatively. Thus we obtain the time measurements of ordinary experience, of science, and of the Theory of Relativity; and I have already referred to the incessant tendency towards confusing these relational aspects of Time with Time itself.

The intercourse between the mind and its environment, or (to employ current phraseology) the influence of the objective world upon the subjective mind, results in the generation of a complex group of images and ideas indelibly stamped with two characteristics that reflect or signify the successiveness of real change—differences in psychic intensity, and systematic order. These form the content of memory, which remains veridical just so long as these characters correspond to their original generating factors. Memory, however, rarely remains absolutely veridical; for

* *Cf.* p. 248, n. † *ante.*

forces within the mind itself constantly modify the vividness and associative order so as to produce false or even hallucinatory memory; but any more detailed consideration of these familiar phenomena would constitute too great a digression into psychology.

It may make my own theory somewhat clearer to compare it once more, in conclusion, with Whitehead's standpoint. He also defines " time as a series " as " an ordered series of moments. Each element of the series exhibits an instantaneous state of nature ".* But on the other hand, he regards " this serial time (as) the result of an intellectual process of abstraction " †—not as a characteristic of Reality, as I have just maintained it to be; and his reason for so doing is, once again, his fallacious distinction between " nature " and reality. " This serial time is evidently not the very passage of nature itself ", since " nature " is always the object of sense-perception, and therefore " a duration with temporal thickness . . . our own present has its antecedents and its consequents ". Nature, in other words, is for Whitehead the content of the *specious* present; it cannot, therefore, be identical with reality, since the character of change makes it impossible that reality should occupy the specious present; it is, on the contrary, a continuous succession of dynamically self-transforming and infinitely diversified phases, each of which is instantaneous.

Finally, we are thus enabled to return a definite reply to the question so frequently debated—Is the universe in Time, or is Time in the universe? For since Time is an essential attribute of reality, it follows that it must fall within reality, and not conversely. On the other hand, each of the momentary phases of real being, being one member of the infinite series and therefore only a part of the whole, exists within Time, wherein it has its own definite position or date. But to say that Time is an attribute of the whole implies, conversely, that the whole is the basis or foundation of Time, as it also is of all its other attributes. Whether or not this

* *The Concept of Nature*, pp. 64, 65, 69.

† *Cf.* p. 34: " time is known to me as an abstraction from the passage of events ".

means further that the whole is " Timeless " depends partly on the precise meaning of this ambiguous term, but mainly on the nature of change.

Change undoubtedly exists within the universe, just as Time does; the only remaining question is then whether change can be predicated of the whole as such. I do not think that it can. Certainly each instantaneous phase of reality changes into its successor; but though this is true it is at the same time seriously inadequate. For change is merely an abstract aspect of development or evolution, so that to describe any systematic process—the growth of a tree *e.g.* or the history of a nation—as change, and nothing more, is quite insufficient; what actually occurs is an evolution—a development—which can only be fully apprehended by regarding the serial process in its entirety—that is, as some type of whole.

Now when we give this obvious principle its full logical expansion, and apply it—as we must do in the end, unless we submit to an unnecessary restriction of our inquiry—to the whole, we find that the evolution of the whole is essentially a *self*-transformation, because all the conditions of its development lie within itself and not outside. This consideration must preclude our affirming that the whole, *as* the whole, can ever change. A tree—a person—a nation—on the other hand, certainly changes, because some of the essential conditions of its evolution always exist in its environment and therefore outside itself; its development, therefore, is always only partially a *self*-development. The evolution of the whole, however, is *completely* a self-development; it itself conditions all its phases absolutely and exhaustively. Conversely, each of these is a manifestation of one and the same real universe; and, in this sense, such a universe cannot change, but retains its own fundamental nature throughout the entire process. We may express this alternatively by saying that Time does not affect this universe—Time makes no difference to its nature; and from this point of view it appears true that the whole is both changeless and Timeless.

CHAPTER XIX

HEGELIAN REALISM

1. In the preceding chapters I have essayed the formulation of a constructive realistic theory of perception and endeavoured to support it indirectly by some criticism of current realisms. But even were a completely satisfactory physical realism once for all established, there would remain a still more fundamental problem—the inclusion, *i.e.* of such a system within a more comprehensive philosophy of universal being.(1)

For the material universe, despite its marvel and mystery, is after all not the whole of reality; it may even be said that it is by no means the most important or the most valuable of reals. The aphorism of Pascal anticipated that modern interpretation of the evolutionary process which is itself only a revival of Aristotle's principle that "the world constitutes a hierarchy of being, in which lower forms of existence and of life point on to higher forms, and that these latter, in proportion to their elevation in the scale of evolution, represent the highest reality more adequately and more fully." * Even the extreme view that mind originates from matter may be construed to mean that matter is but the indispensable basis for mind; or if again we exclude—with Whitehead †—"Nature" from the sphere of mind, still the mind that observes and comprehends Nature appears thereby to prove itself superior to Nature.

The philosophic problem of the reality of the perceived world is thus paralleled by the problem of the ultimate character of that world—of the true implications of its

* Barbour, *Ethical Approach to Theism*, p. 21.
† *The Concept of Nature*, chaps. i, ii.

manifest attributes and structure. Physical realism, therefore, whatever form it may finally assume, owes to itself the duty of completing itself; and here "completing *itself*" must be understood literally, in the sense that its further expansion must be a logical development *from within*, not an artificial supplementation from without. It is recognized, as I have already pointed out, that all realisms alike originate from naïve realism; but it is equally true that all philosophy evolves from naïve realism in the sense that it is rooted in direct or immediate experience, and is, further, an interpretation of that experience. Sufficient proof of this principle is found in its equal prominence in the widely divergent systems of Bergson and Hegel. For the original meaning of "intuition" was the content of sense; * and when we are urged to "place ourselves from the first by an effort of intuition in the concrete flow of duration" we find that "there is one reality which we all seize from within by intuition . . . our own personality . . . our self which endures"; † or, to cite a recent able exposition of Bergson, there exists "something which we know directly . . . what we see, or touch or feel . . . the foundation of knowledge".(2)

Here there at once arises the further question whether "all our knowledge arises out of experience" as well as "begins with experience".‡ But despite its importance this problem is extraneous to my present inquiry, since it deals with the character of knowledge rather than with the nature of the universe. All that is here essential is that in sense-perception we directly apprehend the physical world, so far of course as the nature of reality permits; we are concerned primarily with the *immediacy* of perceptual apprehension, not with its possible extent nor its mode of occurrence; the sensed qualities and attributes are truly physical, and are neither subjective sensations, nor phenomenal representations, nor representative ideas; much less those positive distortions of reality which are regarded by Bergson as the sole results of all intellectual activity.

* *Matière et Mémoire*, p. 59.
† *Introduction to Metaphysics*, pp. 8, 53.
‡ *Critique*, Introduction.

2. With this in mind, it may seem paradoxical or even contradictory to maintain that physical realism is not only consistent with idealism, but that idealism is actually the logical corollary of realism. I have elsewhere, however, ventured the opinion that there are " two marked tendencies in current philosophy—one towards absolutism, the other towards realism " ; and by " absolutism " here I mean " absolute " or " objective idealism ".(3) How far this is true or not depends obviously on the meaning of the term " idealism " ; and I have already stated at the outset that modern realists have totally misapprehended " that phase of idealism which is best described as Hegelian ", citing in support of this opinion a recent assertion by Lord Haldane.*

" Idealism " itself is undeniably a word with many widely diverse meanings ; but it is nonetheless a serious error to identify it mainly or wholly with some phase of subjectivism ; and yet this seems to be the attitude of some modern realists. Perry, expressing the general neo-realistic standpoint, explicitly connects Hegel with Berkeley—" the theory (of) Berkeley is the same as that (of) Hegel . . . *to be is to be either knower or known* " ; † while the belief that Hegelianism is the essence of artificial abstractness and subjectivity has become almost an accepted dogma among students and others interested in philosophy.

To substantiate these statements is a simple matter. The most remarkable instance is Mr. Joad's recent presentation of Hegel's philosophy as maintaining that " there is no distinction between mind and its objects, just as there is no distinction between any two physical objects . . . The ultimate reality is mental in structure, and matter is a delusion ".‡ It needs but the most cursory reading of Hegel himself to recognize this as a complete contradiction of his whole teaching ; yet it is closely paralleled by Russell's account of " idealists ". " Those who maintain " (he asserts) " that mind is the reality and matter an evil dream

* *Cf. ante*, p. 14.
† *Present Philosophical Tendencies*, p. 134.
‡ *Common Sense Ethics*, p. 92.

are called 'idealists'. . . . Idealism says that nothing can be known except thoughts, and all the reality that we know is mental"; a description which can itself be regarded only as "an evil dream".* I am not sure that it is quite fair to cite a volume written so long ago as Professor Andrew Seth's (Pringle-Pattison) *Hegelianism and Personality*; yet I think its author would not object to this, if only as illustrating the history of thought. "The distinctive feature of the Platonic theory of Ideas" we there find, "the type of Hegel's (system), I take to be its endeavour to construct existence out of pure form or abstract thought . . . it seems indubitable that there is in Hegel the attempt to construct the world out of abstract thought or mere universals . . . thought out of its own abstract nature gives birth to the reality of things." † This criticism, however, was anticipated by Hegel himself. "The demand of *a priori* knowledge, which seems to imply that the Idea should construct from itself, is a reconstruction only"; a reconstruction, that is, from the material furnished in concrete experience.‡ More recently we have Professor Laird's assertion that "all idealists, in spite of their differences, dispute this independence of the objects of knowledge"; § similarly the New Realists—"realism is opposed to subjectivism or epistemological idealism which denies that things can exist apart from an experience of them, or independently of the cognitive relation", and "the assertion of idealism that all objects are mental".‖ Thus even when Hegel is not explicitly referred to he is still included among "all idealists" as one leading representative of this philosophic attitude. In rebutting these statements my difficulty is not the paucity of the material provided by Hegel himself, but rather its superabundance. It would be a perfectly simple task to

* *Analysis of Mind*, pp. 10, 20. Contrast Bradley: "while Reality is Experience, thought and truth are merely one aspect of the whole Universe. . . . Do I hold that Reality and Thought are both just the same thing? . . . No" (*Principles of Logic*, vol. ii. pp. 595, 679). It is difficult to understand how such statements are ignored.

† Pp. 122, 117, 118.

‡ *History of Philosophy*, vol. iii. p. 176. *Cf.* below, pp. 262, 267, n. ‖.

§ *Study in Realism*, p. 14.

‖ *New Realism*, p. 474; *Concept of Consciousness*, p. 83.

fill page after page with statements all so definite that to select from among them is most perplexing. The quotations which follow are therefore in no way isolated; they are essential features in Hegel's whole system, repeated again and again throughout the vast range of his volumes, as may easily be seen from the supplementary references which I think it best to confine to footnotes.

First then with regard to reality being "mental in structure", and "matter an evil dream". Surely no modern realist has taken up a standpoint more definite than the following: "I relate myself to an object and then contemplate it as it is. The object, which I at once distinguish from myself, is independent.* I have not made it, it did not wait for me in order to exist, and it remains although I go away from it. I and the object are therefore two independent things".(4) I need only add the passages already quoted which emphasize the fundamental importance of the content of sense-experience as the original datum of philosophy; so that we may summarize Hegel's perfectly definite realism in his own words as having "for us the signification that things as they are in their immediacy have an actual existence".(5)

This attitude, further, is thoroughly characteristic of English Hegelians, even when dealing with abstract logic. The first form of the Subject of the Judgment, *e.g.* is "the actual contact in which reality pressed upon our sense-perception"; and this reality "is undoubtedly self-existent; it is not *merely* in my mind or in my act of judgment . . . it is the point at which the actual world impinges upon my consciousness as real".(6)

3. This characteristic treatment of sense-perception is paralleled by the function consistently assigned to "discursive thinking" throughout Hegel's whole philosophy. Hegel is as fully aware of the abstractness of thought, as thought, as is any modern realist; his most fundamental principle may best be expressed (first) negatively as the essential abstraction of all thought, or of the Notion as such,

* Contrast Joad: "there is no distinction between mind and its objects. . . ."

and of Logic as the science of these entities ; * and also positively, as the equally essential necessity of conceiving the Notion as inseparably united with Being in the actual universe itself. To deal with these points adequately would involve a separate volume specially devoted to the subject ; they may be sufficiently established here by a few emphatic passages. Logic itself, to begin with, is specifically *defined* as " the science of the pure Idea " ; and the express ground of this definition is that " the Idea is in the *abstract* medium of thought ".† Here both the " purity " and the " abstractness " originate in that separateness of thought from Existence or Being which is the prerequisite condition of all discursive thinking—of all mathematics as of all theoretical science. Thought not only begins with abstraction—it *must* so begin, since abstractions form its only possible materials ; and herein lies the fundamental difference between the human mind and the animal—man is able to think because he is able to abstract from the sense-perceived world of primitive experience. But though thought thus begins with abstractions, it cannot rest content with them. Sprung, like the offspring of the dragon's teeth, from the earth of actuality, they retain indelibly the marks of their origin ; thought seeks eternally therefore to reunite itself with that concrete world which it reflects within the individual mind ; ‡ and here we find the positive element in Hegel's system. For it is equally characteristic of the Notion that at this its highest stage thought achieves its final and complete union with reality ; the abstract then merges with the concrete, the subjective with the objective ;

* " Hegel calls the Logic the kingdom of shades, as if to hint that it is but the ghost of reality " (Seth, *From Kant to Hegel*, p. 84).

† *Logic*, sect. 19. *Cf.* also, " *pure* thought is the absolute power of negativity. . . . What is *wanting here is objectivity*. . . . Logic treats of the evolution of the Idea of God in the ether of *pure thought* " (*Philosophy of Religion*, vol. i. p. 187 ; vol. iii. p. 235). My italics ; *cf.* also vol. iii. p. 17.

‡ The recent developments of the physical Theory of Relativity are perhaps the most striking instance of this. For after a lengthy period of most abstract mathematical investigation, it has proved itself competent to elucidate the structure of the whole physical universe. But apart from the extreme abstractness of Relativity, this is equally true of every great scientific theory.

and until this unity is attained the Notion, as such, has not been fully developed.

These principles may be summed up, I believe, in three brief quotations. " According to Aristotle, the Notion, *principium cognoscendi*, is also that which causes movement, *principium essendi*. . . . Essence without existence is a mere abstraction; essentiality must be thought of as existing . . . the indissoluble connection between the notion or thought and being " ; or in a more modern and perhaps still more explicit form : " it is altogether illogical to assume (the truth of the simpler *a priori* principles) apart from existence—the existence, for example, of the universe ". With reference to " being ", I use this term generally in the English sense as equivalent to reality, actuality, existence. I think Hegel often does the same ; but at the same time his purely logical meaning for " being " is the primal and therefore most abstract of all our concepts.*

Hegel's Logic and Philosophy, in short, can be truly understood only in the light of his fundamental principle that " the notion, in its *most abstract terms*, involves being . . . the object of philosophy is the Idea . . . actually existing . . . distinct from *abstract analytic* determinations or from the merely sensible conceptions which usually appropriate to themselves the name of ideas . . . the unity of thought and Being is the fundamental idea of philosophy generally. . . . This Notion is not only an end present in the imagination before its actuality exists, but is also present in reality " (7) ; here the widely current criticism that Hegelianism is the height of abstraction—" the kingdom of shades "—is definitely repudiated ; and curiously enough Hegel himself condemned both Kant and Fichte on this identical ground—because they restricted philosophy to " *pure* self-consciousness "—to " the *Notion* of individuality "—and thus severed the bond which should unite all

* *History of Philosophy*, vol. ii. p. 147. *Philosophy of Religion*, vol. ii. p. 63. *Logic*, sect. 193. *Cf. Logic*, sect. 84, and Wallace, *Prolegomena*, p. 301, note. Bosanquet, *Implication and Linear Inference*, p. 68. *Cf.* also *The Meeting of Extremes*, chap. iv, " Essence and Existence ". At this point, too, the Hegelian " Idea " appears ; but it is unnecessary here to trace the relation between Notion and Idea.

our speculative concepts with actual existence,(8) while he expressly made it his own aim to maintain in the forefront of his thought that essential objectivity which he found lacking in the idealisms of his day ; and his standpoint here is again thoroughly characteristic of English Hegelians. It will be sufficient to contrast Russell's recent criticism of Hegel with a further passage from the latter. " Hegel believed that, by means of *a priori* reasoning, it could be shown that the world *must* have various important characteristics . . . ' logic ' is an investigation of the nature of the universe, in so far as this can be inferred merely from the principle that the universe must be logically self-consistent ".* As a concise summary of everything that Hegel did *not* maintain, this cannot be surpassed.

" Philosophy," he tells us at the very outset of his *Logic*, " is a peculiar mode of thinking." But " it cannot assume that its method of cognition, either for starting or continuing, is one already accepted. . . . We can assume nothing, and assert nothing dogmatically ; nor can we accept the assertions and assumptions of others ".† As I have already sufficiently shown, all philosophy, for Hegel, is rooted in concrete perceptual experience. " *A priori* reasoning " certainly has its place, as nobody is better able to appreciate than Russell himself ; but its true function is the patient interpretation of our experience, not the dogmatic predetermination of what it must reveal. Hegel does not *begin* with any *a priori* " principle that the universe *must* be logically self-consistent " ; he rather *concludes*, from his laborious survey of experience and reality, that it *is* " logically self-consistent " ; ‡ a standpoint obviously in direct opposition to that ascribed to him by Russell. He recognizes quite clearly the extremely restricted scope of *a priori* methods. Mathematics, he points out, " contains

* *Our Knowledge of the External World*, p. 38.

† *Logic*, sects. 2, 1.

‡ *Cf.* below, p. 322. As a matter of fact, Hegel's criticism of Spinoza rests upon the latter's abstract logical dogmatism with its lack of demonstration ; Hegel thus anticipated Russell's standpoint here. *Cf.* below, p. 276.

only simple and definite qualities . . .* and the dependence of these upon each other, the insight into the nature of which is proof, is thus stable, and ensures for proof the logical progress of necessity. This kind of knowledge is capable of *exhausting the nature of its objects*".† Here we find the secret of the apparently mysterious power of *a priori* reasoning—in the relative simplicity of its subject-matter, and the consequent possibility of exhaustively determining the nature of this; whence it at once follows that in philosophy, as Hegel consistently maintains, *a priori* methods are altogether inadequate simply because its field of investigation, being the entire universe, is inexhaustible. Further, since simplicity and exhaustiveness are always matters of degree, it must follow that there is no absolute distinction between *a priori* and *a posteriori* methods and truths; these shade off into each other imperceptibly, so that the *a posteriori* of one stage of experience becomes the *a priori* of a higher stage; "the *a priori* is merely what comes clear and connected out of the mass of the *a posteriori*", as Bosanquet has pointed out.‡ Equally definite is his repudiation of "the confusion of Idealism with rationalism, and the conception of a pale and meagre thought, identified with decaying sense".§

4. It was perfectly logical therefore that allied with his vigorous attack on abstraction there should be an equally emphatic repudiation of subjectivism; the neo-realistic motto—"to get rid of subjectivism"—is simply the modern echo of Hegel. His world (again to cite Reyburn) "is spiritual but not subjective"; the subjective is the superficial—is barren form, empty of all content.‖ This is true

* "Simple and definite", that is, relatively to the concrete universe; this is still true of mathematics despite its enormous development since Hegel wrote.

† *Philosophy of Religion*, vol. iii. p. 171. My italics.

‡ *Implication and Linear Inference*, p. 127. This principle is by no means new; *cf.* Fichte, *Werke*, vol. i. p. 447.

§ *Logic*, vol. ii. p. 276.

‖ "Superficial Idealism, a merely subjective world, a world of consciousness" (*Philosophy of Religion*, vol. iii. p. 326). In this respect again Hegel condemned Kant's system as "subjective idealism", and the "thing-in-itself" as "utter abstraction, total emptiness, the negative of every image, feeling, and definite thought" (*Logic*, sects. 42, 44).

of even the highest level of thought—of the Notion—so long as this remains apart from actuality; the Notion "has to objectify itself"—an assertion which must not be interpreted to mean that either the thinker or his thought constructs "the world out of mere universals" or "gives birth to the reality of things",* since any such implication is at once excluded by what immediately follows, and is indeed the essential mark of a false idealism.(9) "The Notion as such, as distinct from Being, is something purely subjective. . . . The very idea of the Notion implies that it has to do away with this defect of subjectivity, with this distinction between itself and Being, and has to objectify itself. . . . We must give up the idea that (the Notion) is something which *we* only possess, and construct within ourselves." † Again the best instance of what Hegel means here is provided by the modern mathematics of space-time. For many years this remained entirely abstract, a "Notion as such, distinct from Being", and therefore subjective. But when Einstein and others applied its abstract principles to the physical universe, these were no longer "distinct from Being" but rather essentially one with it; this development, further, was natural and logical, not artificial; and thus the Notion objectified itself. The similarity between Hegel's attitude here and the current realistic protests against subjectivism is striking; but the difference between the two standpoints is fundamental. For while many realists identify subjectivism with idealism, Hegel himself draws the necessary distinction between subjective idealism as being false, and objective idealism as being the only true form of all philosophy, in such a way indeed as to imply the well-known ego-centric predicament of neo-realism.‡

Still further, the Notion is itself an element in the real

* *Cf.* p. 256, *ante* (Seth); also Baillie, *Idealistic Construction of Experience*, p. 186.

† *Philosophy of Religion*, vol. iii. p. 356.

‡ "Although the 'I' is the positing, yet the posited content of that which is thought is the object existent in and for itself. If one were to remain at saying that the 'I' is that which posits, this would be the false idealism of modern times" (*History of Philosophy*, vol. i. p. 351).

universe, though not of course a *physical* element. The thinker, his individual thought, and thought as a natural human activity with its results both abstract and practical, are all obviously parts of the real world—factors which no modern realism ever ignores or reduces to epiphenomena as did its cruder nineteenth century predecessors; and this means that the Notion " is itself the act of producing itself as something which has Being, as something objective " ; * although there is here a profounder meaning which will become apparent in connection with the Hegelian " Idea ". Here we need only remark that thought always remains subject to its own rigid laws—to the unchangeable principles of logical necessity; but when we seek the foundation of this necessity we can find it only in the structure of the real universe itself, as the past history and current tendencies of modern science abundantly demonstrate. No scientist, nor indeed any serious thinker, would deny that his thought must keep in unceasing contact with actuality and be prepared at any moment to submit to its conditions and demands—the *raison d'être* of all scientific experiment.

Science, in Hegel's day, was scarcely in its infancy—it was merely embryonic; but nonetheless Hegel fully appreciated its true character insofar as this concerns the relations between thought and reality, and in expressing this he once again repudiates subjectivity. " If it is meant," he says, " that Being, because it has been thought, is therefore no longer Being as such, this is simply an absurd idealism which maintains that if anything is thought it therefore ceases to be " ; and this leads to what is still perhaps the most concise philosophic definition of Science —" Science is the developed connection of the Idea in its totality."(10)

The meaning of the term " Idea "—" Idea in its totality " —still requires consideration, particularly with reference to the profounder implications of modern realism. But enough has been said to prove that, for Hegel at least, idealism is the direct opposite of all abstraction as of all

* *Ibid.*

subjectivism. To "get rid of subjectivism" therefore is not to "get rid of" idealism; for both Hegel himself and the English Hegelians are sound realists; and yet Hegel has said that "every genuine philosophy is idealism".* In what sense this is true, and true in particular of physical realism, obviously depends on the meaning of "Idea"—"ideality"—"idealism"; a question, however, which is best relegated to a separate chapter.

APPENDIX TO CHAPTER XIX

The following passages further elucidate Hegel's emphasis on the objectivity of the Notion (or system of comprehensive concepts)—its essential connection, that is, with the actual universe. Very briefly, his general argument is that this universe is first presented to the human mind in sense-perception; this further implies the repudiation of both the representative realism of Locke and the phenomenalism of Kant, so that the contents sensed in perception become themselves the qualities of the physical world. This appears to be the correct inference from Hegel's whole treatment of the subject, except as regards his analysis of Feeling which I have considered already. In describing Locke's standpoint *e.g.* he says "Locke does not get beyond the ordinary point of view of consciousness, that objects outside of us are the real and the true. . . . The course adopted by Locke is quite a correct one." †

At a later stage this content constitutes the subject-matter of discursive thought—and obviously, its *only* subject-matter, since it is the sole primary source of the material with which thought deals.‡ But thought can operate only by abstraction, although the *degrees* of abstraction vary within very wide limits. Nevertheless the resultant

* *Logic*, sect. 95.

† *History of Philosophy*, vol. iii. pp. 296, 300. *Cf.* further below, p. 266, on "Experience".

‡ "Experience means that the Notion has objective actuality for consciousness" (*Ibid.*, p. 295).

concepts, since they are derived from a common basis in experience and are concerned with one common world, manifest an essential unity, as indeed is obvious from the increasing tendency to unification within the whole of modern science; although here we must again recall the primitiveness of the science of Hegel's own time as a signal tribute to his philosophic insight.

This unity of thought, however, is at first merely implicit; the sciences *e.g.* seem at first to be largely independent of each other; but as discoveries multiply and investigation expands, thought *of itself* manifests this inward unity more and more explicitly. For while science incessantly reacts on science, logic and philosophy in their turn establish more and more firmly the common foundations and the governing principles of all science as such—in other words, of all thought.* Everywhere therefore it is one and the same thought that is operative, disclosing more and more fully its own nature while in so doing it comprehends more and more adequately the real universe. And thus the original abstractness of thought—an abstractness which is the necessary consequence of the conditions of human experience—compensates itself as it were and disappears; so that while every separate department of inquiry still remains abstract, nonetheless the whole body of thought, in becoming inwardly more self-coherent and outwardly more comprehensive, becomes more concrete—identifies itself increasingly with reality even though reality, as a whole, must ever elude its grasp; "the Notion" in short "objectifies *itself*".

So brief a summary must obviously be altogether inadequate; but it is borne out, in my opinion, by the quotations which follow.

"What is required is that the knowing mind . . . should reconcile with itself the world, so that the world's objectivity

* "The transition from the one stage to the higher stage (is) a necessary advance in more concrete determination, and not only a series of random conceptions, and so an advance to perfectly concrete truth" (*Philosophy of Religion*, vol. iii. p. 235). "Logic is the soul which animates both the Philosophy of Nature and the Philosophy of Mind. Logic is the all-animating spirit of all the sciences" (*Logic*, sect. 24).

may be distinct from mind, yet adequate thereto. . . .* It is requisite to Mind that it should not merely be pure thought, but that it should be thought which makes itself objective. . . . The ultimate aim of philosophy is to reconcile thought or the Notion with reality. . . . The result is the thought which is at home with itself, and at the same time embraces the universe therein, and transforms it into an intelligent world" ; or perhaps better, an intelligible world.(11) "It is a common prejudice that Philosophy deals only with abstractions. . . . Its content is abstract, but only as to form and element. In itself the Idea is really concrete. . . . Philosophy is what is most antagonistic to abstraction, and it leads back to the concrete." †

Hegel's treatment of experience is obviously fundamentally important ; that it is wholly free from subjectivism is unquestionable. "Man commences with experience if he desires to arrive at thought. Everything is experienced, not merely what is sensuous, but also what stimulates my mind. Consciousness thus undoubtedly obtains all conceptions and Notions from experience and in experience. Experience is the form of objectivity ; that it is something which is in consciousness means that consciousness sees it as an objective. Experience signifies immediate knowledge, perception" ; but with this Hegel also maintains that thought is implicit in such experience—"sensuous perception and recollection are thought . . . to say that the universal is not the essential reality of nature, that its implicit existence is not the object of thought, is to say that we do not know real existence".(12) This attitude towards experience is characteristic of the whole of Hegel's system ; experience is the manifestation of the relation between the individual mind and objective reality—the point of contact between them—the mind's first grasp of the world, which it finally converts into its stranglehold on reality.‡ It is wholly

* Hegel here anticipates Pringle-Pattison's contention that "to think of the world as a permanent presentation, self-presented to an eternal percipient, does not meet the case, unless we confer upon the presentation just that degree of distinct and independent being which makes it a real object contemplated by the eternal percipient" (*The Idea of God*, p. 197).

† *History of Philosophy*, vol. i. pp. 24, 25.

‡ *Cf. Logic*, sects. 6, 7, 12.

inaccurate therefore to say that " the idealist must first regard human consciousness as constitutive of its objects ", or that " consciousness, especially in its cognitive form, is the one necessary and universal condition of being " ; * all that is implied is that consciousness or experience is our sole means of coming into touch with " real existence " which in itself is objective.

Professor Pringle-Pattison's most recent reference to Hegel conveys certainly an inadequate, if not an inaccurate, interpretation. " We find (he asserts) Hegel, whose philosophy is based upon theory of knowledge, and who takes the view of philosophy as concerned solely with the universal and the eternal ". † But we must add to this what is patent from the passages just cited. So far as Hegel's *Logic* is concerned with knowledge and thought, it is expressly stated that these are the *abstract* aspects of reality, which must be supplemented—or rather which supplement themselves by self-development—in all true philosophy. Logic we have seen to be *defined* as the science of the abstract ; ‡ while " philosophy is most antagonistic to abstraction, and leads back to the concrete ". The theory of knowledge is therefore only one province within the whole of philosophy, and by no means its sole basis ; while knowledge, together with thought, themselves originate from sensuous experience.§ Philosophy, again, deals with the universal ; but this is never the abstract universal ; it is rather the universal which is implicit even in the content of perception ; and the task of philosophy is to educe it therefrom, and to elevate it into the truly concrete universal or " Idea " which is one with Reality.‖

* Perry, *Present Philosophical Tendencies*, pp. 162, 155.

† *The Idea of Immortality*, p. 51.

‡ " The realm of pure thought is only the ghost of the Idea " (Wallace, *Philosophy of Mind*, p. 12).

§ *Cf.* " The first stage of experience is *sense-experience*. But the whole is for the most part implicit in the first stage of experience " (Baillie, *Idealistic Construction of Experience*, p. 84).

‖ " We cannot deduce the various forms (of experience from the conception of complete experience), because Philosophy is reconstruction not creation. Rather we deduce *it* from *them* by a long process " (*Ibid.*, p. 133). On " reconstruction " *cf. ante*, p. 256, n. ‡

REFERENCES TO CHAPTER XIX

1. (P. 253). " So far as the Realist movement of to-day is a reaction towards naïve realism, it is a contradiction of this fundamental principle that the truth is the whole; the same is true of the reality: and it is in approximation to the whole, and not by disruption of the organism of experience into two opposing sides, that truth and reality corroborate one another " (Bosanquet, *Logic*, vol. ii. p. 301).

2. (P. 254). Mrs. Karin Stephen, *The Misuse of Mind*, pp. 18–20. So far as the primary consciousness of " our own personality " is concerned we begin with the content of organic feeling—a principle sufficiently emphasized by Bradley. Similarly for Hegel " experience is the real author of *growth* and *advance* in philosophy . . . this principle of Experience carries with it the unspeakably important condition that, in order to accept and believe any fact, we must be in contact with it. . . . We must be in touch with our subject-matter, whether it be by means of our external senses, or else by our intimate self-consciousness "; and thus sense-experience once more becomes " the foundation of knowledge " (*Logic*, sectt. 12, 7).

3. (P. 255). *Journal of Philosophy*, vol. xix. p. 157. This view I was afterwards pleased to find supported by both earlier and later writers. Dr. Muirhead, for instance, suggests that Caird would have agreed that " Realism itself acknowledges that there are wider outlooks on things, which throw new light on established truths, and, without cancelling them, show us where they lead and what they must ultimately be taken to mean. . . . Realism is clearly on an inclined plane ". Mr. Douglas Fawcett, again, has recently answered his own inquiry " Is realism absorbed by idealism ? " in the affirmative; while a similar position is that of Laurie: " natural realism is to be conceived as a monistic system and as the only true idealism " (*Life of Edward Caird*, pp. 358, 364. *Cf.* Jones, *A Faith that Enquires*, pp. 131, 230. *Mind*, vol. xxxii. pp. 137, 271. *Synthetica*, vol. i. p. 12).

4. (P. 257). *Philosophy of Religion*, vol. i. p. 107. In more general terms, " everything we know both of outward and inward nature, the objective world, is in its own self the same as it is in thought, and to think is to bring out the truth of our object, be it what it may; "—the direct contrary, that is, to " the attempt to construct the world out of abstract thought " (Seth)—for " the fact was originally presented in sensation, perception, or conception " (*Logic*, sect. 22).

5. (P. 257). *History of Philosophy*, vol. iii. p. 78. *Cf.* Reyburn, *Ethical Theory of Hegel*, pp. 49, 83: " Hegel believes that the realism of naïve theory has a certain truth; he denies that the idealism of true thought inhibits its adoption of a realistic stand-

point. . . . Hegel in no wise denies the existence of nature—nature which is temporally prior to the self, and in which the self originates. The world for him is spiritual but not subjective." Similarly Pringle-Pattison: "the larger idealistic truth may be held along with a frankly realistic attitude towards external nature . . . there is no more difficulty in knowing a material thing than in knowing the memory-image of it or any other purely subjective phenomenon" (*The Idea of God*, pp. 201, 202; *cf.* p. 212).

6. (P. 257). Bosanquet, *Logic*, vol. i. p. 106 (second edition). Still more explicitly, "the world of sense-perception has being in its own right, and the splendours and values which we seem to contemplate directly are apprehended by us as they truly are. . . . The universe (cannot) be represented either as a product of discursive thinking, or as reaching its culmination in anything which can reasonably be described by that analogy—for example, in the philosophical consciousness. . . . Hegel's and Green's position is that a chair is a chair. . . . The speculative philosopher recognizes as a comrade the neo-realist who demands a place and being and value for all that sense-perception has to give us . . . we do not deny the reality of the phenomenal world *as presented to intelligent perception*". On the fundamental importance of perception equally for experience and for logic, *cf.* also pp. 3, 48, 71, 77, 84, 102, 113, 134, 137, 174, 182, 184; also Bradley's *Logic*, *passim*, and *Essays on Truth and Reality*, p. 460, and the whole of chap. xvi. *Meeting of Extremes in Contemporary Philosophy*, pp. 2, 5, 7; *Logic*, vol. i. p. 174. *Cf.* further "Croce's Æsthetic", *Proc. Brit. Academy*, vol. ix. pp. 11, 12; also Boyce Gibson, *Philosophical Introduction to Ethics*, p. 137: "the externality of Nature is not a mere appearance. . . ."

7. (P. 259). *Logic*, sectt. 51, 6, 45. *History of Philosophy*, vol. iii. p. 409; vol. i. p. 344. My italics. *Cf.*: "it lies in the very nature of thought and subjectivity to be inseparable from being and objectivity. A concrete thing is always very different from the abstract category as such. No complaint is oftener made against the notion than that it is *abstract*. Of course it is abstract, if abstract means that the medium in which the notion exists is thought in general and not the sensible thing in its empirical concreteness" (*Logic*, sectt. 64, 88, 164). *Cf.* further sect. 142; *Philosophy of Religion*, vol. i. p. 109; vol. ii. pp. 329, 350; and further below, p. 278.

8. (P. 260). "The Kantian philosophy leads reality back to self-consciousness but it can supply no reality to this essence of self-consciousness, pure self-consciousness, nor can it *demonstrate Being* in the same. . . . It is the absolute *form* which Fichte laid hold of . . . not individuality, but the *Notion* of individuality" (*History of Philosophy*, vol. iii. pp. 426, 481. My italics). The criticism

is obviously based on the inadequacy of mere *form*, of the mere *Notion*, to the exclusion of Being. " Being is wanting to them . . . and then their movement is esteemed an empty round of empty abstractions which have no reality " (*Ibid.*, vol. ii. p. 61). The severity of Hegel's attitude towards Kant is hardly sufficiently recognized, in my opinion. " The result arrived at by the Critical Philosophy bade man go and feed on mere husks and chaff " (*Logic*, sect. 28) is the keynote of the lengthy criticism of chap. iv, part ii, of the same work.

9. (P. 262). " We are wrong in representing the speculative to be something existent only in thought or inwardly. . . . False idealism means to be done with what is objective by bringing it into relation with consciousness . . . the false idealism of modern times, according to which thought is always subjective only, and thus not the existent " (*History of Philosophy*, vol. i. pp. 291, 310, 383). *Cf.* p. 264, *ante*. For Hegel the term " speculative " denoted the highest stage of logical thought—" positive " as distinguished from " negative reason " ; *cf. Logic*, chap. vi.

10. (P. 263). *Philosophy of Religion*, vol. iii. pp. 263, 270. *Cf.* also : " The whole of the Idea in itself is science as perfected and complete . . . the working out of the empirical side has really become the conditioning of the Idea " (*History of Philosophy*, vol. iii. p. 176). The true principle of all scientific method is equally well expressed by Hegel : " Observations and experiments, if entered upon in a right way, result in showing that the Notion is the only objective existence. The sensuous individual eludes the experiments . . . and becomes a universal " (*Ibid.*, p. 181). *Cf.* Bradley's recent account of inference as " the ideal self-development of a given object taken as real " (*Principles of Logic*, vol. ii. p. 598).

11. (P. 266). *History of Philosophy*, vol. ii. p. 382 ; vol. iii. pp. 545, 546. The phrase " at home with itself " which occurs so frequently in Hegel's works, and which seems at first so typical of German sentimentality, seems to me to be the literal rendering of Plato's *οἰκείως ἔχειν πρὸς θεόν*—" at home with God "—which occurs in Glover's *Conflict of Religions in the Early Roman Empire*, p. 149. Thus we have in an earlier passage in the same work : " philosophy is being at home with self, just like the homeliness of the Greek ; it is man's being at home in his mind " (vol. i. p. 152).

12. (P. 266). *Ibid.*, vol. iii. pp. 303–309. *Cf.* p. 295 : " Locke demonstrated Thought to be present in sensuous Being—that we obtained the universal, the true, from experience ". On the function of Thought, *cf.* vol. i. p. 95. " Of course we do not say that knowledge is the only form in which Reality can appear, nor the most adequate. But we do say that reality is inseparable from experience " (Bosanquet, *Logic*, vol. ii. p. 306, n.a).

CHAPTER XX

HEGELIAN IDEALISM. IDEA AND IDEALITY

1. I HAVE suggested at the beginning of the previous chapter that physical realism demands inclusion " within a more comprehensive philosophy of universal being ", for the obvious reason that the material universe in itself is not the whole of reality. But even when this is admitted, the sphere of the non-material appears to be so transient and insubstantial that it seems to possess merely a quasi-reality —the shadowy reflection of the truly real world of eternal matter ; so that to claim more than this for the realm of mind is often regarded as but the crudest anthropomorphism *—a conviction expressed in the constant tendency to identify idealism with subjectivism.† At first sight such a conclusion appears unquestionably logical ; " ideas " are in some individual mind ; " idealism " therefore must be subjective ; but it actually rests on what Bosanquet has happily termed " a deep foundation of imperfect logic " ‡ —on a narrow limitation of the meaning of the historic term " idea " together with an overemphasis of its psychological nature as compared with its logical function ; it is something like arguing that because the motor area is inside the boxer's brain, therefore the knock-out blow is wholly " subjective ". Hegel definitely excludes any such interpretation ; Truth is " not the correspondence of external things with my conceptions—for these are only *correct* conceptions held by *me*, the individual person ".§

* It is instructive to notice that in his *Study of Kant* Ward maintains that Kant's philosophy rests on anthropomorphism (pp. 132–134).

† I may refer to my earlier comments on Russell and Joad.

‡ *Implication and Linear Inference*, p. 61.

§ *Logic*, sect. 213. " Truth " is one of the fundamental Hegelian categories, far transcending " correctness ". *Cf.* below, p. 283.

But " ideas " are not only in the individual mind ; they also constitute the greater part of objective knowledge ; and the subjectivism imputed to the idealist then comes to mean that " idealism rests fundamentally upon a theory of *knowledge* ", although the " knowledge " is certainly that of a " super-personal consciousness " ;(1) and while this is by no means an adequate account of Hegel's idealism, it nevertheless brings into prominence characteristics which are necessarily emphasized in that system, simply because experience, in order to attain its highest levels, must assume the form of conception and thought ; the objective existent Notion therefore, if it is to be experienced by us at all, must retain some degree of connection with these ; for otherwise it would at once become an unknowable thing-in-itself.*

It is further true that other idealistic thinkers, both before and after Hegel, have expressed themselves in such a way that Perry's criticism seems to be justified ; but as I am dealing only with Hegel's idealism, I shall leave them out of consideration, except to point out that with regard to two of them—Kant and Fichte—Hegel condemned the abstract emptiness of their final conclusions because, while they established " self-consciousness " as the ground of Reality, objective Being itself was altogether absent.† Hegel himself, on the contrary, unceasingly maintained " the indissoluble connection between the notion or thought and being " ; ‡ and this must be equally true of knowledge so far as this is truly philosophical ; for Hegel distinguishes clearly between knowledge at the level of ordinary experience and philosophic knowledge proper.§ But this " connection between thought and being " always rests upon their distinction from one another. Knowledge in its Hegelian sense, indeed, is best defined as insight into the necessary

* *Ante*, p. 266 ; " to say that the universal is not the essential reality of nature is (to say) that we do not know real existence ".

† *Ante*, p. 259.

‡ *Logic*, sect. 193. *Cf.* sect. 55, where he condemns the " disjunction of the notion from reality ".

§ *Cf.* the contrast between *wissen* and *erkennen* (*Philosophy of Religion*, vol. i. pp. 119, 120, and *Logic*, sect. 2)

connection of the whole structure of reality; it is "intuition", not in Bergson's meaning, but as truly logical.(2) Thus far therefore it is altogether impossible to hold that Hegel asserts that "the external world is reduced to knowledge . . . being is dependent on the knowing of it". Philosophic knowledge is certainly (for Hegel) the supreme level of all human experience; but it is equally an insight into a world of reality *objective* to knowledge, and therefore not "*reduced* to knowledge". Here again we trace thought to its origin within sensuous experience wherefrom its entire material is derived,* although it is by that very process transformed; but this obviously cannot mean that "to know is to generate the reality known", since the "reality" (subject to the foregoing proviso) is already given in perceptual experience. "Thought determines what is objective in the natural things which are present in sensuous consciousness, as an objective Thought. In knowing this objective universal, I remain *confronting it* from the standpoint of objectivity".†

2. So much, then, for all *human* experience; but at this point it must be noted that our finite experience is always self-transcendent; it is incessantly expanding itself and in every direction, therefore, overcoming its own temporary limitations; nor is there any reason to believe that this inherent self-transcendence need ever cease. As this process continues therefore, philosophic speculation is justified in inquiring what is the logical result of such a development? What does it really imply? Only a hopelessly crude materialism would deny the legitimacy of this question; it certainly cannot be regarded as foreign to the tendency of current thought. But obviously, when we pursue this course we at once raise the profoundest metaphysical issues. As Perry has pointed out, "knowing receives a new definition—the systematizing activity of a universal thinking . . . the transcendental subject"; and again we must face the problem whether this supreme or infinite

* *Ante*, p. 266.

† *History of Philosophy*, vol. i. p. 95; abridged; my italics; on Hegel's use of "reality", see below, p. 304.

knowledge—" absolute knowledge ", as Hegel calls it—" is an originating or creative process ".

I am concerned (once again) only with Hegel's solution of this problem ; and this is best deferred—because it will then be better appreciated—until I deal at a later stage with the Hegelian Idea. Here I need only outline the process of transition from the human level to its final consummation in Hegel's own terms, and then exclude another radical misinterpretation of his attitude and method which is widely prevalent. " Finite self-consciousness " then, " has ceased to be finite ; absolute self-consciousness has attained to the reality which it lacked before. To know opposition in unity, and unity in opposition—this is absolute knowledge " ; * and what this implies turns on the meaning of the word " absolute ".

Here again, in the first place, Hegel excludes all abstraction : " often absolute means nothing more than abstract " ;† but this is never its true meaning. For " though the Absolute is Thought, it must be concrete in itself and not abstract . . . absolutely existent spirit . . . the real concrete is the knowing of the mundane as implicitly divine, as universal, as the world of intellect " : ‡—all the emphasis falling on the *concrete*, on the *existent* as this is presented to ordinary " mundane " experience. But ordinary experience at the perceptual level can never discern the real nature and significance of the " mundane ", which reveals its secret only to thought in all its diverse activities ; and in this there is nothing fanciful, for it is only what is expressed in the well-known lines :—

> Flower in the crannied wall . . .

Here Tennyson's conclusion is wholly identical with Hegel's :

> I should know what God and man is.

Finite mind, that is, would enjoy absolute knowledge—and so would be no longer finite ; it would have " attained

* *History of Philosophy*, vol. iii. p. 551.
† *Philosophy of Religion*, vol. iii. p. 275.
‡ *History o Philosophy*, vol. iii. pp. 1, 2, 3.

to the reality which it lacked before". To this infinite goal every advance in scientific knowledge is plainly a further approximation; it is a nearer approach to the "intuitive understanding, which holds Notion and sensuous perception in one Unity"; * and here it becomes important to notice that as this advance goes on, all the contradictions and perplexities which characterize early thought slowly resolve themselves and give place to an increasing unity.† This is one patent characteristic of all scientific progress, expressed by Hegel as knowing "opposition in unity, and unity in opposition"; by which he means that true unity can be adequately apprehended only by observing the contribution which each of the apparently opposed elements actually makes towards it—by discovering the complicated interrelations which bind together all the widely diverse factors into a single whole; a principle which is illustrated alike by the electrons in the atom, and the "process of the suns"; ‡ "absolute knowledge" therefore means final, coherent and complete knowledge of reality, although at the same time reality remains ever inexhaustible by finite minds.

Despite its unavoidable inadequacy, this brief summary of Hegel's general position brings to light certain features of vital importance. In the first place it is in complete accord with the entire development of scientific knowledge since Hegel's own time. For that development is very much more than a mere accumulation of facts and details; its expansion means also its self-organization or unification —the dissolution of contradictions both between the different sciences and within every special science, as manifested equally in their increasing approximation towards each other and in the growing influence of the abstract and

* *History of Philosophy*, vol. iii., p. 474.

† "Thought is pure unity with itself, from which all that is obscure and dark has disappeared . . . pure intuition" (*Philosophy of Religion*, vol. iii. p. 8).

‡ *Cf.* "We have come to recognize that the stellar system is one great organization, and that the stars which are shining now are more or less coeval with one another. . . . We now believe that it was one process of evolution sweeping across the primordial matter which caused it to form itself into stars, and these original stars are the actual stars which we see shining now" (Professor Eddington in *Nature*, vol. 111, p. 18).

a priori sciences, such as mathematics and logic, upon the theoretic constructions of the more concrete.(3) It is significant further that Tennyson's poetry expresses the unconscious attitude of a large number of reflective minds towards the Cosmos; and though too much importance must not be attributed to a single author, still the spirit of much of Tennyson's work is unmistakably Hegelian. But the most fundamental point here is that not one of Hegel's central principles was advanced as an assumption ;(4) and this leads to the positive aspect of this system—its claim to rest on nothing other than a detailed survey of the real universe, together with, of course, what it regards as the logical implications of the nature of the universe thus apprehended; and that survey, once again, must begin with our direct perception of the physical world which, so far as perception carries us, is the real world.* Hegel's criticism of Spinoza, in fact, partly rests on that thinker's failure to establish his main principles by a similar practical method. " Spinoza ", he argues, " puts substance at the head of his system, and *defines* it to be the unity of thought and extension, *without demonstrating* how he gets to this distinction, or how he traces it back to the unity of substance ; " † Spinoza's procedure, in short, is too abstract and dogmatic because it lacks the indispensable preliminary investigation of the actual concrete world.

Such a speculative development obviously constitutes a direct challenge to modern realism, and so far as it is ignored or evaded realists are guilty of " theoretical timidity and pessimism, which prefers in a difficult situation to seek safety in retrogression rather than success in advance ".‡ I shall therefore outline Hegel's idealism from the modern realistic standpoint in order to show that his distinctive idealistic principles form the logical supplement of all the current types of physical realism.

3. At the end of the previous chapter we saw that for Hegel " every genuine philosophy is idealism " ; § and his

* *Ante*, p. 273. *Cf.* also earlier references, p. 257, n. (6).
† *Logic*, sect. 151. My italics. *Cf, ante*, p. 260, n. ‡, on Russell.
‡ Bosanquet, *Logic*, vol. ii. p. 301. § *Ante*, p. 264.

reason for this assertion is profoundly important. " Every philosophy is idealism ", then, because the " ideality of the finite is the chief maxim of philosophy ". At first sight, undoubtedly, the form of this expression seems to confirm all those criticisms of idealistic philosophy which I have just considered ; but this can only be through the misunderstanding of its true significance—a significance which is made perfectly definite by Hegel himself. His elucidation has both its negative and its positive aspects. To begin with, the predominantly psychological meaning—which is also the predominantly modern meaning—of " idea " is altogether excluded.(5) For, as I have already observed, this is the ground of his condemnation of Kant's system as being finally inadequate—that the Kantian categories were confined " to the subject mind ", instead of being attributed to the objective world as " characteristics of the objects " ; the result being that " both the form and the matter of knowledge are supplied by the knowing subject ", so that Kant gives us nothing more than " subjective idealism ", on which " not a word need be wasted ",* and from which Hegel categorically distinguishes his own system as " absolute idealism ". It is perfectly clear that while the current realist criticisms of idealism may be justified in the case of other thinkers, they are altogether inapplicable to Hegel, since he has himself explicitly anticipated and refuted them.

The distinctively Hegelian meaning of " Idea " must be wholly different therefore from its mere psychological significance.† Idea always denotes *objective* reality ; although at the same time this objective reality must be apprehensible, *in its reality*, by the human mind, since it would otherwise be a mere unknowable Thing-in-itself ; and Hegel contends that throughout the whole range of our experience the mind remains—in principle, and apart from

* *Ibid.*, sects. 42, 45. *Cf. ante*, p. 259. Also *History of Philosophy*, vol. iii. p. 410. Contrast however Kemp Smith, *Theory of Knowledge*, p. 131.

† " When the abstract understanding tells us that in this actual world we must knock ideas out of our heads, it is necessary energetically to protest against these doctrines, alike in the name of science and of sound reason. For Ideas are not confined to our heads merely " (*Logic*, sect. 142).

errors and illusions—in direct contact with objective reality—first of all in and through perception, but further, and still more intimately, in all thought; and thus Hegel escapes from both Kant's subjectivism and his phenomenalism.(6) The term "notion" must be interpreted as "all-comprehensive concept"; * so that we have here the clearest distinction between "external existence" and that "ideal content" which the mind must create if it is to understand that existence—a distinction, however, which at the same time plainly implies an indestructible correlation.

But objective reality, still further, reveals itself to be throughout systematic—interrelated from end to end, and from beginning to end; and this is the fuller meaning of "Idea"—it is the "system of reason"; † a phrase which, despite its superficial subjectivism, must again be interpreted as essentially objective. "The Idea", Hegel points out, "is frequently treated as a mere logical form. Such a view must be abandoned. . . . It is no less false to imagine the Idea to be mere abstraction . . . in its own self it is essentially concrete." ‡ I shall recur to this point, remarking only that "reason" finds its justification here in the profound consequences which emerge from the characteristic connection between all thought and reality. Finally, the "Idea" is *complete* or *total* reality—once again as systematic.§

4. The three essential characteristics of the Hegelian "Idea" are thus objective reality or existence, universal systematic structure, and completeness; the term denotes, in short, the systematic existent whole of reality; and philosophy then becomes the investigation of this reality—

* That is the notion proper. General ideas are often called concepts or notions; but as Hegel points out, "what are called notions, such as man, house, animal, *etc.*, are simply denotations and abstract representations" (*Logic*, sect. 164). But he often uses the term in both senses.

† *Ibid.*, sect. 18.

‡ *Ibid.*, sect. 213. *Cf.* "idealism maintains the organic and even supra-organic nature of thought and being. . . . Such an organism which is life, thinking, will, is what Hegel calls the Idea: an organism which is completely organic, with no mere matter: and that Idea is the foundation of his Idealism" (Wallace, *Prolegomena*, p. 154). Here "matter" is contrasted with "form"; it is not matter as physically existent.

§ *Ibid.*, sect. 243. "The idea is presented as a systematic totality."

in other words, of the actual universe.* It is, of course, an investigation controlled by its own peculiar principles, exactly as science is a parallel investigation characterized by its own methods also; and their connection, for Hegel, was a very close one; his constant aim was "to bring philosophy nearer to the form of science, where it can lay aside the name of *love* of knowledge and be actual *knowledge*".† At the same time this outline is far from being an adequate account of Hegel's philosophy of the "Idea"; difficult problems of logic and profound religious principles are alike raised by it; ‡ as Ferrier wittily expressed it, "Hegel requires to be distilled, to an unparalleled extent"; § but it will suffice as a basis for a discussion of the deeper implications of modern realism.

It may assist us to understand Hegel, however, to recall his relation to Plato, a relation upon which he himself always laid marked emphasis. Whatever else may be implied by the Platonic "Ideas", they were certainly both objective and existent—the eternal "forms" of all reality, or the changeless types of all real being; plainly therefore not mere subjective entities within any individual mind. Nor were they remote from human experience; they were rather the very substance of that experience. "The (Platonic) Idea", observes Hegel, "is the Universal, not as the formal Universal, but as implicitly and explicitly existent, as reality . . . the Idea is both universal thought and the existent." ‖ It is true that Hegel regarded his own idealism as an advance beyond that of Plato; "we must stand above Plato",¶ he says. For the Idea of the Greek thinker

* "The object of philosophy is the Idea . . . actually existing"; (*Ibid.*, sect. 6).

† *Phenomenology*, I, 5. "The relation of speculative science (philosophy) to the other sciences may be stated in the following terms. It does not in the least neglect the empirical facts contained in the several sciences, but recognizes and adopts them; but it introduces other categories. The difference is only a change of categories" (*Logic*, sect. 9).

‡ "The notion of an immanent Deity forms the very centre of Hegel's thought" (Bosanquet, *Hegel's Philosophy of Fine Art*, p. xxx).

§ *Institutes of Metaphysics*, p. 96.

‖ *History of Philosophy*, vol. ii. pp. 29, 54. In its religious aspect Hegel identifies the Idea with God (*Philosophy of Religion*, vol. iii. pp. 1, 7).

¶ *History of Philosophy*, vol. ii. p. 10.

seemed to him to be "substance" rather than "spirit", at once too abstract and too static; * his own claim being in no sense merely personal, but simply expressing the natural evolution of thought. It is in Aristotle that he finds the more adequate presentation of the nature of the Idea; but in both philosophers alike existence and objectivity are its essential characteristics.(7) "Through the presentation of his Ideas, Plato opened up the intellectual world, which is not beyond reality, but is the real world . . . in this absence of rationality which has its actuality in ordinary existence, is found the utter barbarism of thought, in that it keeps to another world." Plato, however, was free equally from such "utter barbarism" and from subjectivism; and it should be noted that for Plato, as for Hegel, philosophy must find its material within perceptual experience. "Plato is seeking something stable, that can be known behind the unknowable flux . . . the existence and nature of which can be discerned only by a process of abstract reasoning, though this reasoning takes its start from a careful study of the phenomena of this world."(8)

The distinctively Hegelian Idea then, as essentially objective, denotes complete and total reality, systematic in its structure and dynamic in its processes. "This Idea comprehends the entire wealth of the natural and spiritual world in itself . . . while it is in the Idea alone that everything has its truth, as being a moment of its essential existence"; † here again we must note the inclusion of the "natural world" as it exists for perception, not as any type of *Ding-an-sich*. This fundamental objectivity of the Idea disproves Perry's assertion that "Plato was quite innocent of the use of the idealistic principle . . . Plato

* This is the meaning, I think, of Hegel's outline of the three periods of Greek philosophy in his *History of Philosophy*, vol. i. pp. 163, 164 "The concrete Thought is with Plato the still abstract Idea. . . . Plato's Ideas are in themselves devoid of movement" (*Ibid.*, pp. 165, 312). "Plato did not get beyond the category of life. We have not yet reached the essential characteristic of Spirit" (*Philosophy of Religion*, vol. iii. p. 343).

† *Philosophy of Religion*, vol. i. p. 206. For the meaning of "truth" *cf.* below, p. 283. "The Idea is essentially a process" (*Logic*, sect. 215).

and Spinoza are representative of an absolutism that did not enjoy the support of idealism ".* This is true only if " idealism " is given its narrower meaning as being identical with subjectivism ; and this is also the case to some degree with Alexander.†(9)

If we give to " truth " here its Hegelian meaning, the idealistic creed is precisely this " faith that the truth is the whole " ; or, in other words, that nothing can be comprehended adequately except insofar as it is taken in its relation to the whole. I do not mean that this is the only significance of the term " idealism " ; but it is the Hegelian sense of the term, so that, for Hegel, there is no distinction between " absolutism " and " idealism " unless it be a distinction between two aspects of one and the same universe. His very definition of " Idea " places this point beyond all doubt ; " the definition declares the Absolute to be the Idea ; . . . the Absolute is the universal and one idea " ; ‡ so that in calling his own system " absolute idealism " § he does not for a moment imply that it rests on any subjective basis which, as subjective, is then somehow further qualified as " absolute ". On the contrary, such a standpoint is expressly excluded ; " what has to be avoided is that we should think that Being is given up and that we pass into consciousness as opposed to Being (in so doing the universal would lose all its speculative significance) ; the universal is immanent in nature ".‖

5. It now becomes possible to consider Hegel's reason for his assertion that " every genuine philosophy is idealism ", which is that the " ideality of the finite is the chief maxim of philosophy " ; ¶ and again " ideality " is devoid of all subjective reference, since it derives its meaning from the objective term " Idea ". " Ideality " therefore is an

* *Present Philosophical Tendencies*, pp. 169, 166.

† " The essence of this creed " (absolute idealism) " consists not so much in its idealism as in its faith that the truth is the whole, in comparison with which all finites are incomplete and therefore false. The sting of absolute idealism lies in its assertion that the parts of the world are not ultimately real or *true*, but only the whole is *true* " (*Space, Time, and Deity*, vol. i. pp. 7, 8).

‡ *Logic*, sect. 213.

§ *Ante*, p. 277.

‖ *History of Philosophy*, vol. i. p. 347.

¶ *Ante*, p. 277.

inherently objective characteristic of finite entities which are also objective; it never implies that these, either in their existence or their nature, are dependent on being apprehended, or perceived, or known, by any individual observer, although at the same time knowledge itself is a vitally important element in the entire situation; nor has it ever, for Hegel, its Kantian significance —that the "ideality of space and time means their subjectivity".*

Despite the difficulties which attend Hegel's terminology, his use of "ideality" should be much more readily apprehended and endorsed to-day than was possible at the time he wrote; for it is amply justified by all the implications of modern science, which on this point, as before,† finds itself in the closest interrelation with philosophy. One of the most fundamental scientific principles is the essential oneness of the universe—the truth, which is becoming ever more and more obvious, that no entity exists in isolation or acts independently of the other elements in the world. This has long been a commonplace in Biology, based as this is on its evolutionary foundation; but it has been given its most detailed and specific expression in Physics. Professor Eddington's assertion that the stellar universe is the arena of one all-embracing wave of development ‡ is confirmed by the relativistic concept of a finite physical universe.§ Within this universe, still further, every element, no matter how minute, reacts upon and influences the vast whole. "Science and philosophy", observes Whitehead, "have been apt to entangle themselves in a simple-minded theory that an object is at one place at any definite time, and is in no sense anywhere else"; but on the contrary, "each object is in some sense ingredient throughout nature . . . nature is a system . . . the modification of the electromagnetic field at every point of space at each instant owing

* Caird, *The Critical Philosophy of Kant*, vol. i. p. 301.
† *Ante*, p. 275.
‡ *Ante*, p. 275, n. ‡.
§ "The universe must of necessity be spatially unbounded and of finite magnitude" (Einstein, *Sidelights on Relativity*, pp. 21, 23).

to the past history of each electron is another way of stating the same fact ".*

It is impossible to over-emphasize the philosophic implications of these scientific principles—implications which Hegel, despite his ignorance of our modern wealth of facts, summed up in the truth of " the ideality of the finite "—the " chief maxim " not merely of his own but of all philosophy. The Idea denotes " the systematic existent whole of reality " ; it logically follows therefore that " every individual being is some one aspect of the Idea. Everything actual, insofar as it is true, is the Idea, and has its truth by and in virtue of the Idea alone ".† Here Hegel reminds us of Plato and Spinoza—of the all-inclusive Idea of the Good, and of the one real substance whereof all phenomena are attributes and modes. But just as " we must stand above Plato ", so we must advance beyond Spinoza—from the Spinozistic " Substance " to the profounder conception of " Spirit ".‡ The principle that everything is " one aspect of the Idea ", however, is not affected by the problem of its ultimate nature ; and this relation to the Idea then constitutes what Hegel always calls the " truth " of any given existent—a usage somewhat different from the modern sense of the word, although paralleled by many of its current applications. Its distinctive Hegelian meaning corresponds to that of the " true State " or " true work of art ", implying that the entity, whatever it may be, is one with its ideal or standard—" these are true, if they are as they ought to be " ; § and the stricter logical meaning is obviously but one particular instance of this. Every departure from

* *The Concept of Nature*, pp. 145, 146. " Ingredient " may here be taken to mean active, operative, influential. Whitehead takes up the realistic position, so that " nature " is directly apprehended through perception.

† *Logic*, sect. 213. This principle is plainly the converse of Whitehead's " ingredience ".

‡ " The absolute Substance of Spinoza falls short of absolute spirit . . . the Idea is *in the first place* only the one universal *substance* ; but its developed and genuine actuality is to be as a *subject*. . . . Substance is conceived, not as wisdom, but only as power. . . . It is essentially purposeless empty power which merely staggers about " (*Logic*, sectt. 50, 213. *Philosophy of Religion*, vol. i. p. 333).

§ *Logic*, sect. 213.

normality is then a loss of " truth ", as in " false perspective " ; and " truth " thus becomes a matter of the relations between any given entity and those others which, with itself, form some definite system—artistic, social or logical as the case may be. " A sick body is not in harmony with the notion (concept) of body, and there is a want of congruity between theft and the notion of human conduct " ; * the " truth " of the human body, that is to say, is health, and of conduct honesty ; or in general, the " truth " of anything is to be found within some wider whole than itself to which it points, and only with reference to which it can be fully understood. Since this is universally the case, the final " truth " of all things alike lies in the objective Idea ; and this is entirely in consonance with the trend of present-day science. It plainly implies, further, that together with any given existent or process " yet other actualities are needed, which in their turn appear to have a self-subsistence of their own. It is only in them altogether and in their relation that the notion is realized " ; † here " realized " must be interpreted in its literal sense of " making real or actual " as in " realizing " some moral aim or political purpose.

This is the true meaning of Hegel's " ideality ". It is that characteristic of all the elements and processes in the real world in virtue of which they imply some system more inclusive than themselves ; and when this principle is carried to its logical conclusion we attain the Idea as, once again, the objective whole of Reality.‡ The " ideality of the finite " thus means that it finds its due place and character only within the system of the interrelated whole ; for nothing finite is self-centred or self-complete ; its essential nature always radiates far beyond itself.

Realism can criticize this standpoint only at the cost of rejecting the basis of modern science ; for whether or not it involves a philosophic Monism—and neo-realism, at least, declares itself to be pluralistic §—it is plainly in harmony

* *Logic*, sect. 172. † *Ibid.*, sect. 213.
‡ Strictly, the " Idea as such " ; *cf. ante*, p. 280.
§ " Tends to be metaphysically pluralistic rather than monistic " (*New Realism*, p. 33).

with the methodological and conceptual monism which correlates all the sciences in an ever-increasing degree; the physical universe, at least, is one, and its science is one also. It may be true that "Idea" and "ideality" are not the best terms whereby to express this practical and objective monism; still they form a most valuable historic bond between the fundamentals of present-day science and the intuitive objectivity of Greek thought; and Hegel only anticipated the modern outlook upon the physical world in saying that "the notion of ideality just lies in its being the truth of reality. When reality is explicitly put as what it implicitly is, it is at once seen to be ideality".* This general principle has, however, two distinct meanings which merge into each other—a narrower and a wider. In the first place every system in the physical universe implies a system more comprehensive than itself; and with this no type of current Realism can disagree. But at this stage in philosophic speculation all Realisms alike are faced by a still more fundamental problem: Has the physical universe, *taken as a whole*, its own "ideality"?—does it also point towards and signify some system more inclusive than itself, in the same way that all its sub-systems do? To ignore this problem is to confine modern Realism within limits so narrow as to be unworthy of the true spirit of philosophic inquiry;† but Hegel's solution raises so many new and important points that its consideration is best resumed in a fresh chapter.

REFERENCES TO CHAPTER XX

1. (P. 272). "The external world (is) reduced to knowledge . . . *being is dependent on the knowing of it* . . . the cardinal principle of modern idealism consists in a single proposition . . . knowledge is an originating or creative process . . . *to know is to generate the reality known* . . . the being and nature of things are conditioned by their being known" (*Present Philosophical Tendencies*, pp. 113, 114, 119). "The central conception of objective idealism is the conception of a super-personal, or impersonal, logical consciousness

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* *Logic*, sect. 96

† *Cf. ante*, p. 276.

(which) conditions being; its enactments are binding on the individual thinker, as his 'objective' reality . . . knowing receives a new definition—the systematizing activity of a universal thinking . . . the transcendental subject" (*Ibid.*, pp. 135, 144). *Cf.* p. 148: "the dependence of being on a knowing mind, that transcends and envelops both the physical and psychical orders".

2. (P. 273). "Intuition means looking at an object intrinsically systematic and distinct, and discerning its constitutive terms and relations . . . it is only in part that thought is discursive; it has also an intuitive aspect . . . pure and simple intuition is completely the same as pure and simple thought. . . . Knowledge must relate to characteristics, content, and must be complete and proved knowledge, in which the necessary connection of these characteristics is a matter of knowledge. . . . The whole of philosophy is nothing else than a study of the nature of different kinds of unity" (Bosanquet, *Implication and Linear Inference*, p. 94; *Principle of Individuality*, p. 55. Hegel, *Logic*, sect. 63. *Cf.* Reyburn, *Ethical Theory of Hegel*, p. 62. *Philosophy of Religion*, vol. i. pp. 44, 100).

3. (P. 276). *Cf.* the relation of mathematics, not only to physics but also to psychology and economics; similarly the connection between physics, chemistry and physiology; and finally between mathematics itself and logic. "It is the degree of complication", says Dr. Dorothy Wrinch, "in certain logical deductions which makes it convenient to shut some of them off from the rest of logic and call them mathematics. There is no fundamental difference whatever" (*Proc. Arist. Soc.*, vol. xxi. p. 195). Similarly Bradley has suggested that mathematics is "the soul of logic and of metaphysics" (*Principles of Logic*, second edition, vol. i. p. 387).

4. (P. 276). I have already dealt with this subject in referring to Russell's attribution of *a priori* methods to Hegel (*ante*, p. 260); but this erroneous view is advanced by other prominent writers: "the *assumption* for philosophical purposes that there is an all-sufficient, all-general principle, a single fundamental proposition that adequately determines or explains everything"; "the constant *presupposition* is that a spiritual life which is a unified whole is at work". "To classify things as ideas, objects of knowledge, or experiences, at the outset . . . is to *assume* the thesis." *New Realism*, p. 16. *Present Philosophical Tendencies*, p. 113 (quoted from Eucken), and p. 128. My italics. My previous quotations are amply sufficient to show that the methods of *a priori* argument and of presupposition are expressly excluded by both Hegel and the English Hegelians (*ante*, p. 260). *Cf.* also Pringle-Pattison's protest, *Idea of God*, p. 67.

5. (P. 277). "Ideal", he observes, often means "existing as a representation in consciousness: whatever is in a mental concept, idea or imagination is 'ideal': 'ideal' is just another word for

' in imagination '—something not merely distinct from the real, but *essentially not real*" : which is precisely the criticism directed by current realism against all subjective idealism. But this is also Hegel's own position ; he likewise describes this as " subjective idealism "—and totally repudiates it (*Logic*, sect. 95, and pp. 413, 414. My italics). *Cf.* sect. 3, and *Philosophy of Religion*, vol. i. p. 116.

6. (P. 278). But thought must not be divorced from perception, for " sensuous perception and recollection are thought " (*History of Philosophy*, vol. iii. p. 305). *Cf.* my previous references to the inseparability of thought from existence, *ante*, p. 259. " The objective world is in itself and for itself the Idea. . . . The Idea is the absolute unity of the notion and objectivity. Its ' ideal ' content is nothing but the notion in its detailed terms ; its ' real ' content is only the exhibition which the notion gives itself in the form of external existence " (*Logic*, sectt. 235, 213).

7. (P. 280). " The idea such as Plato, and, still better, as Aristotle conceived it. . . . Aristotle calls the Platonic idea a mere *δύναμις*, and establishes in opposition to Plato that the idea is essentially to be viewed as an *ἐνέργεια*. . . ." (*Logic*, pp. xxiii, 259). " Aristotle, a man whose like no later age has ever yet produced. Aristotle excels Plato in speculative depth. . . ." (*History of Philosophy*, vol. ii. pp. 117–120). " The philosophic culture of Plato was not yet ripe ; the Idea was still too fresh and new ; it was only in Aristotle that it attained to a systematic form of representation " (*Ibid.*, p. 17).

8. (P. 280). *Ibid.*, vol. ii. p. 29 ; vol. iii. p. 43. Gaye, *Platonic Conception of Immortality*, p. 106. Hegel gives a clear account of the various aspects of the Idea in his *History of Philosophy*, vol. ii. p. 49 : " The Platonist point is that we no more put the universal into things than we create things by perceiving them or thinking about them. . . . The present passage (Parm. 132 b c) is the only one in all his works where it is ever suggested that a form is an ' idea in the mind ' or a ' mental state ', and the suggestion is only made to meet with a refutation which is unanswerable ". . . . " Plato's theory of ' Ideas ', as the true objects of knowledge, is not at all a doctrine of ' Idealism ' in the modern sense of the world "—the sense, *i.e.* of subjective idealism (Taylor, *Proc. Arist. Soc.*, vol. xvi. pp. 271, 272 ; *Plato*, p. 43).

9. (P. 281). Hegel's whole treatment of the Idea raises many difficult points. It seems to me that he distinguishes " the Idea as such " from " the notion of the Idea ", the first then being the " object " (*Gegenstand*) of the second (sect. 236) ; this " notion of the Idea " is the *logical* aspect, or *thought* aspect, of the " Idea as such " ; it is the " Pure Idea "—" the Idea in the abstract medium of Thought " of sect. 19 ; so that the science of logic is " the pure idea for which the idea is "—for which, in other words, the idea

as such exists (sect. 243); this "pure Idea", finally, is also the Absolute Idea, or Speculative Idea (sect. 235). *Cf.* "The Idea is frequently treated as a mere logical form. Such a view must be abandoned" (sect. 213). "The thinking idea, by means of which the logico-metaphysical nature of the *Idea as such* enters into the thinking consciousness" (Bosanquet, *Hegel's Philosophy of Fine Art*, p. 77). The italics are Hegel's own, and indicate a clear distinction between "the thinking idea" and "the Idea as such". If this view is correct, it confirms the principle of his distinction between Reality and Thought, as being at least two distinguishable aspects; and my succeeding remarks are intended to apply to the "Idea as such"—to Reality as the object of Thought. I think this interpretation agrees, in principle, with McTaggart's exposition, *Commentary on Hegel's Logic*, sect. 292.

CHAPTER XXI

THE "IDEALITY" OF THE PHYSICAL WORLD: (1) AS TEMPORAL

1. It is now obvious that the detailed study of Hegel's whole position proves its compatibility with the most realistic of modern realisms, so far as these bear upon the independent existence of the perceived physical universe. This universe, further, unquestionably exhibits a fundamental unity—a principle founded not on any purely metaphysical assumptions, but rather on the logical implications of scientific observation, method and theory.* Its unity, finally, is a true unity, not a mere uniformity; which means that it is a unity not simply in harmony with the infinite diversity of natural processes, but actually constituted by that diversity—just as (to repeat an earlier illustration) every great tragedy derives its grandeur from the profound opposition which destroys the protagonists. This unity rooted in diversity—this "identity in difference"—is expressed in what Hegel calls the "ideality of the finite"; for it can subsist only if every element implies at once all it correlates, and the whole which they together form. Diversity, unity and wholeness are thus the fundamental characters of the material universe; to which must now be added infinity in its true philosophic sense of completeness—finality—all-inclusiveness. It is unfortunately true that "infinite" usually means endless, unbounded, everlasting; and in this sense its best-known instances are "infinite" space and time, and the "infinite series" of mathematics. But Hegel describes this aspect

* "The result of philosophy . . . is the issue of experiment made on the concrete Reality" (Bradley, *Logic*, vol. ii. p. 728).

as " the wrong or negative infinity " ; it emphasizes the most superficial features and ignores the profoundest characteristics. For it is plain that all we have in these phenomena is the unceasing repetition of the finite—additional spaces, moments, or quantities as the case may be. Instead of advancing beyond the finite, therefore, we are indissolubly fettered to it ; bound to it, still further, under its emptiest and most abstract form—as mere space, time, and quantity, without the slightest diversity to relieve its monotonous homogeneity. Even here, nevertheless, the mind manifests its desire for completeness in its futile attempts to achieve an impossible totality ; for as Hegel points out, " the finite rises again the same as ever, and is never got rid of and absorbed ".*

Further consideration, however, reveals the deeper significance of these facts. The finite is certainly the transient ; but the real meaning of this is that in itself the finite lacks completeness ; it passes away and yields its place to some other thing finite like itself ; and when this ceaseless process reveals its immanent law, every finite complex is seen to be a phase—a mode—an attribute —of the Universe which, *as* the Universe, though never as any of its phenomenal aspects, is unitary and complete.† This I take to be no mere philosophic presupposition, but the logical consequence of the modern scientific outlook on the world, although it is in form identical with the one substance of Spinoza ; only, as we have already seen from Hegel's criticism, Spinoza's profound principle lacked an empirical basis ; but this, again, so far as the material universe is concerned, is furnished by the relativistic theory of the world as spatio-temporally finite, but unbounded.

The relativist's " finite ", however, is such by contrast with the " wrong infinity " of unending time and unbounded space.‡ But if we interpret the finite as what it truly is—

* *Logic*, sect. 94. *Cf.* Bosanquet, *Logic*, vol. i. p. 161, and McTaggart, *Commentary*, sect. 33. This does not affect the mathematical devices for summing infinite series.

† *Cf.* Chapter XVIII *ante* on Time.

‡ " The theme ", as Hegel ironically observes, " of barren declamation to astronomers with a talent for edification " (*Ibid.*).

the incomplete—we obtain the real meaning of infinite as " complete in itself "—self-complete, or (if the term be preferred) perfect ; an attribute which is approximated to most nearly by all great products of art. In themselves these enjoy perfection, since they need nothing beyond themselves to make them what they are ; but the term " in themselves " betrays the finitude of this perfection ; for it is always conditioned, created, partial ; the true infinite therefore lies ever beyond human experience.*

Precisely the same thing is true of the physical universe ; simply as material, it may in a sense be regarded as self-complete, and therefore as infinite ; but this infinity is obviously not absolute. It does not include the spheres of mind and society, of history, religion and art ; and however transient a crude materialism may consider these to be, they are still real while they exist, and must therefore be considered by every serious philosophy. What then are their implications for Realism ?

It will be convenient to use the term " finite mind ", or (at this stage) " mind " alone, to denote all phenomena and processes other than material. Such a signification, though undoubtedly very wide, is nevertheless legitimate insofar as some form of awareness or " consciousness " is always present, constituting the field of investigation for Psychology. I have already dealt with the theory that " consciousness " is nothing more than some selected complex from among a wider whole of material entities ; † and I shall myself employ the word to denote that experience (or aspect of experience) which Alexander says is " enjoyed ". This standpoint is recognized, I believe, even by behaviourists. " If a behaviourist be enlightened ", asserts Perry, " he will have no intention of omitting any facts, but only of abandoning a theory. He does not abandon *consciousness*, but the introspective *theory* of consciousness. . . . (He) concedes that introspection and all its

* " An infinite straight line may serve as a type of (wrong) infinity. Infinity in the Hegelian sense does not partake in any way of this endlessness. . . . Its root-idea is self-completeness or satisfaction " (Bosanquet, *Hegel's Philosophy of Fine Art*, p. xxvi).

† *Ante*, Chapter XII.

works must find a place in any comprehensive and adequate view of mind".* Consciousness, further, is from even its lowest stages conative, and therefore operative and active within the real world; although the ultimate character of the dynamic relations between matter and mind must here be left an open question.

But this realistic distinction between mind and matter can never become an absolute separation or opposition. For in spite of their fundamental ontological difference, within our actual experience they are always found in relation to each other. This relation has two aspects—the temporal and the logical. In the order of evolutionary development mental phenomena succeed material phenomena.† Further, mind always reacts or responds to matter—this being its primitive conative quality; and as it becomes more and more complex, this reaction necessitates that advancing apprehension of the material world which finally constitutes thought and knowledge.‡ I shall consider these two aspects separately.

2. Evolution, in the first place, obviously means far more than mere succession. The later in time is universally the higher in organization—a principle which is established by its very exceptions; and still further, every stage in development becomes the indispensable means towards the next higher level of being. This is true equally in the sphere of matter and in that of mind; but it must also apply to the *relation* between the material and the mental. In the universal order therefore the ganglion is lower than the reflex it subserves, and the brain than the mind of which it is the basis and instrument; while on a still wider scale, the geological and geographical characters of a country most profoundly influence national temperament and destiny.§ It is possible therefore that the culture of the

* *Journal of Philosophy*, vol. xviii. pp. 87, 88.

† This is explicitly recognized by Hegel: "nature which is temporally prior to the self, and in which the self originates"; Reyburn, *Ethical Theory of Hegel*, p. 83. The frequent imputation to him of the opposite view springs from the confusion between "mental" and "spiritual," "rational" or "ideal".

‡ *Cf.* Bosanquet, *The Value and Destiny of the Individual*, Lecture III.

§ *Cf.* J. L. Myres, *The Dawn of History*.

Greeks had one source in the sea which allured their wandering ancestors, and the triumphs of Rome in the very soil of Latium. Here of course we meet the difficulty that our knowledge of these phenomena is limited to our own planet; but this is at best a negative consideration. It is quite possible that some parallel development of life and consciousness occurs in other stellar systems; it certainly seems illogical to conclude that the earth exhausts all the possibilities of the universe in this direction.* But however that may be, we are compelled to view the entire development in the light of the Aristotelian principle of its final cause or end; and thus the purpose of matter realizes itself as life and mind, just as from the savage tribe there emerges the modern state with its own future history still hidden within itself.

Such an interpretation of evolution must profoundly modify the realist's attitude towards the physical universe. For it means that matter is something more than simply physical, in the sense that it contains the potentialities of something higher in the scale of being than itself. Life and consciousness are now found to be implicit in matter, as the oak is implicit in the acorn; and just as every element in the material world implies all the others, so that world as a whole implies all that arises out of it, or (at the least) rests upon it as an essential foundation. Thus the ontological difference between matter and mind is supplemented by their inherent correlation; they are not merely coexistent within one dualistic universe, held together by the scholastic God of Descartes or merged in the mystic Substance of Spinoza; rather is matter the indispensable *prius* to mind, and mind the natural complement to matter, so that through their diversity and unity they form a true universe. This view, however, involves neither panpsychism nor panhylism; it neither converts the material into the mental, nor confers on every atom its own elementary mind. Mind and matter remain exactly what they are for direct experience, diverse ontologically but one functionally; or in

* This suggestion appears to find support in Dr. Jeans's article, *Nature*, vol. 114, p. 829.

Hegelian terminology, " in Mind (nature) first attains its goal and its truth ".*

I suggested at the beginning of the present chapter that the physical universe, as physical, was infinite in the sense of self-contained or self-complete. But considered in its relation to the still wider universe which includes both the material and the mental, the physical world is seen to be finite, just as is each of its constituents ; and if we regard it further as the necessary basis of the higher psychical order, then we may apply to it Hegel's principle of the " ideality of the finite ", because it implies a system far more comprehensive than itself. This principle, once again, is advanced not as a metaphysical presupposition nor an *a priori* truth, but wholly as the outcome of direct observation and analysis, so that it becomes nothing more than the extension of the modern scientific spirit and method to all the phenomena of nature and mind inclusively. The argument is *post hoc, ergo propter hoc* ; † mind, by a natural process, has actually supervened upon matter ; conversely, therefore, matter is the necessary basis for mind, which, still further, possesses in all its modes a limitless capacity for self-development. For it would be sheer dogmatism to assert that knowledge and emotion must somewhere find their progress stayed ; rather does every increase in knowledge, all deepening of emotion, react upon the whole of experience and facilitate its higher advance.

3. This temporal aspect of the ideality of the finite physical universe is of most profound significance. For it at once raises the problem of the character of the " wholeness " of the universe, particularly in relation to Time ; and we are logically compelled to interpret the past of the world in the light of the present and the future. From this standpoint Past, Present and Future are in their concreteness ‡ really one, or are at least aspects of the fundamental

* *Logic*, sect, 96. On " truth " *cf. ante*, p. 283.

† The logical force of this obviously increases with the universality of its application ; it becomes more and more a matter of necessity rather than of mere contingency.

‡ That is when taken with all their content—not merely as abstract extension and duration.

unity; and while the future is essentially different from the past, nevertheless *all* the concrete future must be regarded as contained within the concrete past. The future, in other words, is not the past plus something added on to it; it is rather the past transformed, but not therefore increased or expanded; so that the entire past is always the final and sufficient ground, or the complete condition, of the whole future.* The only logical alternative to this conclusion is the appearance of the new characteristics of the future from nowhere—their emergence out of nothing—an absolute creation from pure nullity which is unnecessary, and which would be incomprehensible even if it were necessary. For the continuous transformation of the concrete past does not imply the absence of novelty and creation, in the truest and most literal sense of these words; on the contrary, this transformation itself *is* creation and inexhaustible newness. We are committed neither to William James's "block universe", nor to the *tout est donné* of Bergson's philosophy; the dynamic infinity of the whole at once excludes both suggestions as equally unfounded.

It is true that when we consider the development of any limited sectors of the universe, narrower therefore than the whole itself, we always find additions—expansions—increases—some elements present at every stage which, as such, were absent from earlier stages. But this is obviously the logical consequence of the initial limitation—a limitation which is of course operative in every actual investigation, where the development is always the outcome of the reaction between any selected group of phenomena and those environmental processes with which these are essentially connected, but which have been deliberately excluded from consideration for purposes of convenience or even convention. Exactly where the dividing line is to be drawn depends on the circumstances of every given case. The growth of a child *e.g.* may be regarded as determined either by the characters of its parents together with its immediate environment, or by the whole course of its

* This principle finds its scientific basis in space-time as a four-dimensional continuum.

ancestry combined with all the ruling social and economic conditions of its day; and these again have their ground in the history of the nation and the temperament of the race. In every instance alike therefore we may conceivably expand the sphere of our inquiry without limit, the only difficulty being the practical one of the rapidly increasing number and complexity of the phenomena to be considered. To a certain extent, however, this may be avoided by generalization through abstraction—a procedure which attains its universality of application at the expense of that poverty of content which is characteristic of all abstract science. But even here a certain wholeness continues dominant; the properties of any given geometrical figure *e.g.* are grounded in its relation to the whole of space, as is manifest from the differences between Euclidean and non-Euclidean geometries with all their further physical and astronomical implications; and here again, the more complex the figure becomes, so much the more must the totality of conditions be taken into account, until finally the time-space continuum identifies itself with the material universe. In general therefore the more concrete the science and the wider the field of investigation, the nearer do we approach the actual whole. But this again implies that the conditions which control the entire evolution fall to a greater and greater degree within the scope of the inquiry itself, instead of being excluded as accessory or irrelevant; so that while the development necessitates novelty and creation, and apart from these could not indeed be development at all, still this gradually ceases to take the form of mere addition and becomes in the main the transformation of a content which, taken formally and simply as content, remains identical with itself. Perhaps the best actual instance is that of the solar system, the evolution of which is—at least conceivably—explicable in terms of its own nature and past history, apart from any influences acting upon it from outside itself; * this may also be true of the internal configuration of the stable

* Except for the probability of tidal reaction, at some very early stage, with a passing star; but this is quite an exceptional if not unique occurrence. *Cf.* note *, p. 293 *ante*.

chemical atoms, which are in principle however solar systems in miniature. A third case is that of the energy transformations of the physical universe, assuming this to be finite in the relativist sense; here again we have incessant newness, which arises however not from any addition to the energy total but only from its continuous transformation. In all these phenomena there is a certain wholeness or totality; everything which falls short of this either exhausts its own capacity, whereupon its development ceases; or it draws upon the resources of the whole by which it is included and sustained.*

On the other hand, whenever inquiry is concerned with origins the departure from wholeness becomes patent. Every "origin", to begin with, is more or less arbitrary or conventional; it is merely some specific stage selected from the entire continuous series because it possesses certain easily discerned and definite characteristics; but the more complex the system, the more difficult it becomes to assign its origin, as in the case, once again, of the solar system, or of any great nation. "In history", an able critic has said, "nothing begins and nothing ends; it is not possible to assign any precise date to the birth of the Greek race or the Greek genius." † Here, in truth, the search for origins is vain, simply because we are approaching that whole of being which has no origin except itself *as* a whole; and we obtain the so-called original phase of any system only by some degree of limitation which, while quite legitimate scientifically, must always be transcended by philosophy. The most frequent criterion of such origin is simplicity. But simplicity is always relative, and is very often quite illusory, as in the case of the early phases of national history and of living germ-cells. The latter, indeed, are themselves the main determinants of the entire course of development; so that what really occurs here resembles the expansion or unfolding of a highly complex

* "In the world-organism there is no outside world, no inorganic or extra-organic thing. The organ and its environment is combined in one, re-united; the plant or animal is not without its place, and its place is not without plant or animal" (Wallace, *Prolegomena*, p. 154).

† Mackail, *Lectures on Greek Poetry*, p. 5.

but closely packed structure, rather than any advance from real simplicity to higher complexity; and this is also true of the radio-active chemical elements.

In these and all analogous phenomena therefore we are concerned throughout with systematic complexity of structure and organization; and development must then be interpreted not merely in terms of *degrees* of this complexity but, more fundamentally, in terms of its *modes*, and of the incessant conversion of one mode into another. Thus all "origins" are characterized by their constituents being so arranged that, while remaining united together, each is capable of forming a continuous series of further combinations until a new system has been constructed, whose elements are so connected that fresh combination ceases to be possible. But alike at the beginning as at the end of every such series the degree of complexity in itself must be high, since only a complex system is capable of providing the necessary bases from which the final structure can arise.

All development is thus a continuous transformation of the mode of complexity of the developing system. If this system is relatively limited and restricted, there occurs also a heightening of its complexity as the evolution advances; but the more extensive the system becomes the less prominent is this mere increase, and the more noticeable the change in the mode of the complexity of the whole.

4. If finally we apply this principle to the universe it means that each of the phases of the entire course of its development contains within itself all the conditions which determine the characteristics of every succeeding phase. The term "phase", however, has here the widest possible meaning; it denotes the *whole* universe during any given length of time, long or short as the case may be; it is not limited in its contents, but only in its duration. With reference to natural phenomena alone, indeed, Whitehead has already employed "duration" in the same sense; *

* "A certain whole of nature which is limited only by the property of being a simultaneity. . . . A duration is a concrete slab of nature limited by simultaneity which is an essential factor disclosed in sense-awareness" (*The Concept of Nature*, p. 53). On Whitehead's realistic standpoint *cf. ante*, p. 60; also Chapter XVIII on Time.

and when we extend the application of this suggestion to the whole of reality, as including much more than "nature", we have what I have called a "phase". But the principle has a double application, and implies some kind of equivalence between the earlier phases of the universe and the later. This equivalence of course cannot take the form of an *existential* identity, for that could characterize only a "block universe". It is an equality not explicit and patent, but implicit or latent. The later stages of the universe did not, *as such*, exist at any earlier period; nevertheless the preceding phases of themselves necessitated the later. Every phase alike therefore is what it is, but is also—implicitly—something other than what it is. It is therefore self-transcendent, containing within itself the necessary and sufficient conditions of all else that is to be; and for realism this means that the universe, at every stage alike, is always something other than merely physical in the sense that the physical world * comprises within itself the determinants of the later appearing psychical existents—consciousness, thought and knowledge. But this, once again, must not be understood as any form of panpsychism; it does not mean that some form or degree of finite awareness has always existed, much less that consciousness is merely epiphenomenal, or simply a group somehow selected from the whole of physical existents. On the contrary, the physical is just the physical, and the psychical the psychical, exactly as they are for direct observation. At its present stage the universe includes both in a true unity, despite their ontological diversity. But further, the universe has always included conditions or relations which necessitated that its physical constituents should, as such, become the basis of psychical existents; and this principle I call "the ideality of the physical world" in its temporal aspect, because it is founded on the interpretation of the universe in the light of those phenomena which have appeared latest in time.

It is plainly therefore not an assumption or presupposition; on the contrary its logical character is that of all

* I regard the ether, whatever its nature may be, as physical.

post hoc, ergo propter hoc arguments ; * and it is capable of being extended to all types of prior existents whatever, provided that there is good evidence for them as actual entities. The essential point is the fundamental equivalence between all stages or phases or " durations " (in Whitehead's sense) of the universe ; an equivalence, however, which holds within a dynamic universe and necessitates therefore incessant novelty and creation. This suggestion is not an impossible one ; it is illustrated even in mathematical abstractions by expansions such as $(a + x)^n = a^n + a^{n-1}x + \ldots$, and the generation of curves and surfaces by moving points and lines. Here we have on the two sides of the equation or process entities which are essentially different, but which are still equivalent ; nor can it be objected that the equivalence here is arbitrary or conventional, since all mathematical formulæ, in principle, express some characteristics of reality.† If therefore it is possible to discern Space-Time as the foundation of physical (and all other) existents, as Alexander has argued,‡ it would still remain true that the universe has always exhibited characteristics which necessitated that from Space-Time, purely as such, all later existence should proceed ; and if, further, Deity remains a level always unattained, there must nonetheless have always existed the true equivalent of Deity.

But it seems impossible, at this stage, to advance beyond this bare postulation of some " equivalence " in the direction of any positive expression of its characteristics. All we can assert is that the physical world is ever self-transcendent,

* *Ante*, p. 294.

† As this obvious fact seems often overlooked I may again quote Whitehead. " Mathematics is necessarily the foundation of exact thought as applied to natural phenomena . . . the properties of space which are investigated in geometry, like those of number, are properties belonging to things as things " (*Introduction to Mathematics*, pp. 8, 244). On the connection between Mathematics and Logic, *cf. ante*, p. 276, n. (3).

‡ " A vital part of my view, the doctrine of intuition. The sensum is a bit of space-time which has the quality green . . . the patch which is known to intuition. Thus for me the sensum already implies an intuition which is a lower experience than sensation " (*Mind*, vol. xxxii. p. 5). *Cf.* a somewhat similar view in Laurie's *Synthetica*, vol. i. p. 27: " The first two moments of the process that issues in the consciousness of an object in sensation are *below* consciousness."

and that the Universe is ever super-physical.* In other words, the material world, simply as material, and as apart from the coexistent transcendent factor (whatever its nature is) is inadequate to evolve the later psychical stages; just as the expression $(a + x)$, without the index, is equal to nothing but itself; so that the index may represent the "transcendent" and its dynamic functions. Whether this is true also of Space-Time depends on what the full character of Space-Time is taken to be. If it is a physical element, just as carbon and nitrogen are physical, then I fail to understand how it can generate anything beyond itself; on the other hand, if Deity is its eternal outcome, then the Universe, even at its primal spatio-temporal stage, must have been somehow equivalent to infinite Deity. We have here, in fact, the ancient problem of δύναμις and ἐνέργεια; and as Pringle-Pattison has observed, our conception of the former springs from our experience of the latter. "The ἐνέργεια is always prior in thought to the δύναμις; for it is only as the δύναμις of the ἐνέργεια that the δύναμις is named." †

5. It is obvious that we are here concerned throughout with a fundamental objectivity—an objectivity which is, further, completely systematic and interconnected. These features of the situation have already been emphasized repeatedly, but the persistent tendency to interpret everything that is not physical as being merely subjective must once again be guarded against. I have thus far maintained the objective nature of the physical world, a standpoint with which all realists are in agreement. But it now becomes inevitable that realism should advance beyond this point, and in admitting the self-transcendence of the physical must also accept the equal objectivity of the super-physical transcendent element, whatever the character of this may be; and in so doing realism expands itself into a philosophic system whose best appellation is still the "absolute idealism" of Hegel and of Plato; for both thinkers alike main-

* Similarly, but in its purely *durational* aspect, the Universe is self-transcendent.

† *From Kant to Hegel*, p. 72.

tained the objective existence of the Idea.* Further, since the "transcendent" is implied by the very nature of the physical as this has revealed itself in the course of evolution, the two factors must together constitute *one* unified interrelated system objectively existent.†

The word "implied" however raises another serious difficulty; for it is an essentially logical term, usually taken to mean that one judgment or assertion "implies" other judgments and assertions; logical implication therefore is to begin with something subjective. But, as we have just seen with regard to mathematics and logic, the implications of thought always reflect the connections of objective being; logical necessity, in short, is always based on existential necessity. "The nature of things", as Bradley has observed, "must be respected by logic"; ‡ or more fully (in Hegel's words) "in the nature of existence . . . consists logical necessity in general. This alone is what is rational, the rhythm of the organic whole"; § a principle equally accepted by Perry.(1) Neo-realism, in its insistence on objective implication, thus comes into complete accord with Hegelian idealism; but it is certainly somewhat unfortunate that we now encounter Hegel's "Notion", a term already defined as the "all-comprehensive concept".‖ As Wallace has pointed out, "*Notion* is a quite insignificant rendering of Hegel's *Begriff*".¶ Its essential feature, however, is again dynamic objectivity; so that while there undoubtedly is a *logical* "notion"—a concept attained by thought—still this is always imposed upon thought (as Perry contends) by the nature of objective existence; and this is the true import of the Hegelian term. It is perhaps not without significance that one meaning of *begreifen* is to touch—feel—handle; whence *Begriff*, with

* *Cf ante*, p. 280, n. (8), on Plato's "Refutation of Idealism" in the modern subjective sense of "Idealism".

† It may be added that, *sub specie eternitatis*, subjectivity and objectivity merge into one another, and in that sense, as Hegel himself maintains, disappear.

‡ *Principles of Logic*, p. 137.

§ *Phenomenology*, vol. i. p. 55. ‖ *Ante*, p. 278.

¶ *Prolegomena*, p. 305. It seems to have been adopted by Stirling, while W. T. Harris suggested "self-activity".

characteristic Hegelian literalness,* implies the closest possible contact between thought and being; so that the mind "handles" or "grips" reality, while the objective Notion includes it within one all-comprehensive grasp. A still better term wherewith to convey this significance of *Begriff* in its dynamic objectivity is "Self-determination", which, again, is for Hegel equivalent to true freedom.(2) The Universe, this means, is self-determining under two aspects—both objectively in its content, and also subjectively as the form of this content; and we thus obtain two of the three great subdivisions of the theory of the Notion—the "Subjective or Formal Notion", and "the Notion invested with the character of immediacy, or of Objectivity"; † nevertheless the Notion still remains united with empirical existence as this is given in perception.(3)

In modern terminology, this whole or universe comprises the physical world, which again, as self-transcendent, has always implied the realm of the psychical as being equally real and objective with itself. The material world therefore is essentially finite, and like every finite entity, it exhibits "ideality"—it implies and forms a necessary part of a more comprehensive system than itself. This result is expressed by Hegel as follows: "ideality is not somewhat outside of and beside reality; the notion of ideality just lies in its being the truth of reality . . . when reality is explicitly put as what it implicitly is, it is at once seen to be ideality. . . . Ideality only has a meaning when it is the ideality of something; but this something is not a mere indefinite this or that, but existence characterized as reality".‡

It seems at first sight difficult to reconcile this position with what has already been said on ideality. For by "reality" is usually meant the whole of being; and this, obviously, cannot imply any system wider than itself. But

* Bosanquet has suggested that this literality constitutes one difficulty in the study of Hegel. "The hardest of all lessons in interpretation is to believe that great men mean what they say" (*Hegel's Philosophy of Fine Art*, p. xix).

† *Logic*, sect. 162.

‡ *Ibid.*, sect. 96.

the term " reality " has a much more restricted significance for Hegel than for English philosophy ; it is one of the earliest categories attained in his *Logic*, and therefore one of the most abstract and empty. The logical advance begins with Being, which then becomes Determinate Being or Quality ; and this, further, is cognized as " an existent " —as " determinateness which *is* ", or Quality as " Reality ". This Reality, finally, is primarily sensible ; for Hegel expressly distinguishes his own technical use of " real " from such metaphorical statements as " this is a real occupation, a real man. Here ", he adds, " the term does not merely mean outward and immediate existence ", and in that case " reality is *not distinct* from ideality ".* Thus " reality ", strictly interpreted, means for Hegel " outward and immediate existence " ; and " immediate ", again, is equivalent to " sensible "—" an immediate, and therefore a sensible quality ".† When therefore " reality " is distinguished from " ideality ", as in the passages just quoted, it means not the whole of existence, but only *sensible* existence—in other words, the physical world ; and it is this " real " world which then is also " ideal ", in the sense of its self-transcendence and implication of the immaterial sphere in its inexhaustible entirety.

This analysis of Hegel's procedure appears to remove the difficulty which McTaggart finds in his introduction of the category of Reality.‡ I have suggested that " Reality " denotes only the level of sensible existence, and Hegel's own account of the logical advance to this level seems to me perfectly simple and clear. Thought begins with " mere being " ; but this must not be " confused with being modified and determinate " ; and when, still further, " we go on to consider determinate Being as a determinateness which *is*, we get in this way what is called Reality ".§

* *Logic*, sectt. 90, 91 ; my italics. † *Ibid.*, sect. 172.

‡ " The reason for this is not very obvious. Reality seems to be taken as a matter of degree—a thing is more or less Real in proportion as it is regarded under a more or less true category. . . . I cannot see why Reality comes in here, if it did not come in before " (*Commentary*, sect. 23).

§ *Logic*, sect. 91.

If we accept some such progressive differentiation of the presentation continuum as is described by Ward, Hegel's treatment is not only logically, but is also psychologically, correct; * and while the application of "real" to degrees of truth is recognized as permissible, in the sense "that some existence agrees with its notion", this is at the same time excluded as metaphorical; the Hegelian term equivalent to the English use of Reality is Actuality.(4) Thus it is always the whole of Being—which may again be regarded as equivalent, from the religious standpoint, to God—that is rational, not the "real" material world, nor indeed any entity whatever less than the Whole; to ascribe the latter view to Hegel, as is so often done, is altogether to misrepresent his philosophy; and as we have seen already, "the notion of an immanent Deity forms the very centre of Hegel's thought".

It may be noted in this connection that Reyburn, impressed with the fundamental importance of the English term, has translated *Realität* by "actuality" and *Wirklichkeit* by "reality". This enables him to treat Hegel's standpoint as "The Real and the Rational"; † and there need be no confusion if the essential distinction is clearly comprehended, though the ambiguous terminology is certainly unfortunate.

The next chapter will deal with the logical character of ideality.

REFERENCES TO CHAPTER XXI

1. (P. 302). "If there are any universal implications residing in the nature of all things, implications belonging to the province of logic, then they are necessary for all thought. But the necessity lies ultimately in the nature of things, and *is binding on thought only so far as thought is bound to things. Knowing must seize upon the nature of its object.* As a matter of fact, objective idealism has deduced the categories from the object and not from the subject.

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* "The lowest mode of apprehension, and that least appropriate to the mind, is purely sensuous apprehension" (*Hegel's Philosophy of Fine Art* (Bosanquet), p. 104).

† *Hegel's Ethical Theory*, chap. iii. The reference to the translation on p. xx is evidently wrongly printed.

. . . The actual subject yields to necessities which are dictated to it by something beyond itself " (*Present Philosophical Tendencies*, pp. 159, 160). *Cf.* also Alexander's treatment of categories.

2. (P. 303). *Cf.* McTaggart, *Commentary*, sect. 36 ; and Reyburn, *The Ethical Theory of Hegel*, pp. 37, 38 : " the notion is a principle which owns its differences . . . is absolute because it is self-determined ". But I think that Reyburn has under-emphasized the existential or empirical aspect of the Notion, though my opinion may be mistaken. But if it is at all well-founded, the notion becomes merely abstract, as Hegel himself points out. " The notion is abstract, if abstract means that the medium in which the notion exists is thought in general and not the sensible thing in its empirical concreteness . . . the notion involves Being and Essence, and the total wealth of these two spheres with them, merged in the unity of thought " (*Logic*, sectt. 164, 160).

3. (P. 303). " The empirical, comprehended in its synthesis, is the Notion . . . the system of the Universe shows forth its essence as Notion, as a connected whole. . . . The Notion is the principle of freedom, the power of substance self-realized. It is a systematic whole, in which each of its constituent functions is the very total which the notion is, and is put as indissolubly one with it " (*History of Philosophy*, vol. ii. p. 133 ; vol. i. p. 449. *Logic*, sect. 160). The unity of the two aspects of the Notion, as subjective and as objective, then constitutes the Idea.

4. (P. 305). " What is reasonable is actual, and what is actual is reasonable. . . . God is the supreme actuality, He alone is truly actual . . . existence is in part mere appearance, and only in part actuality. . . . I had accurately distinguished (actuality) from the categories of existence and the other modifications of being. . . . The Idea is the absolutely active as well as actual . . . everything which is not reasonable must on that very ground cease to be held actual " (*Logic*, sectt. 6, 142). After criticizing the popular opposition between thought and actuality, Hegel goes on to ascribe the above principle to Aristotle.

CHAPTER XXII

THE "IDEALITY" OF THE PHYSICAL WORLD: (2) AS LOGICAL

1. The temporal aspects of ideality have received too slight consideration in idealistic philosophy, which has been concerned almost exclusively with the functional relations between mind and the external world, rather than with the significance of the evolutionary process which reveals matter as the natural basis of mind. Most probably this is due to the recency of the firm establishment of the evolutionary principle; but this is so fundamental to the whole of modern science, and the facts themselves are so patent and indisputable, that the truth of ideality will be most readily appreciated when it is approached from the standpoint outlined in the previous chapter.

When the material world is thus regarded as its basis, the apparent transiency and insubstantiality of mind as compared with matter * assume a new aspect; for these characteristics really imply that mind has been freed from the restrictions which set a limit to the further development of matter itself. In the living human body physical organization, as such, seems—in principle—to have attained its highest point and realized all its possibilities. It is of course abstractly conceivable that the organism may develop in an entirely new direction; on the other hand this suggestion is largely negatived by the high capacity which mind now possesses of adapting itself to all fresh conditions without necessitating any important changes in bodily structure; so that if, for example, telepathic pheno-

* Whether directly perceived or not is irrelevant; very few ontologies dispense altogether with a physical world.

mena should actually occur, still no striking bodily variation need accompany them.

Thus we find one outstanding characteristic of mind, as an element of the real whole, in the limitless possibilities of its further development. The idealistic principle of an infinite knowledge or experience is therefore far from being a merely anthropomorphic illusion. Every advance in thought facilitates a further advance far greater than itself; "dialectic" (as Bosanquet has happily observed) "marches with seven-league boots"; * and when emotion is aroused and expresses itself in practical activity this is still more true. The "Absolute Idea" of Hegel's Logic is then allied to Spinoza's "intellectual love of God"; or, reverting to the literal interpretation of Hegelian terminology, *der Begriff* becomes the mind's all-comprehensive grasp of the whole of reality. The progress of modern science hitherto is a patent illustration of these principles, while its future developments transcend conception; and if it is objected that the ultimate nature of reality must remain ever inexhaustible, still this asymptotic expansion of thought reveals its own true infinity.

"The aim of philosophy", Hegel tells us, "is to ascertain the necessity of things"; † and this "necessity of things", he further maintains, must reveal itself in their history. The temporal aspect of ideality thus furnishes the key to the understanding of its logical character. For the emergence of mind from the physical world means that it remains always connected with that world; this indestructible interrelation constitutes indeed the fundamental principle of every type of realism. So far as "sensations" are a moment or element in consciousness, awareness of them is the immediate effect of the action of the physical world upon the organism, while developed perception is the direct cognizance of that world as such; and therefore, since all thought and knowledge arise from this perceptual basis, the higher forms of mind unceasingly deepen and widen our insight into the ultimate nature of reality.

* *Implication and Linear Inference*, p. 128.

† *Logic*, sect. 119 (1). "All true thinking" (he continues) "is a thinking of necessity."

But the essential characteristic of mind—a characteristic more and more fully revealed as its evolution proceeds—is its inherent necessity, manifested equally in the organic structure assumed by its content and in the processes which stabilize that structure and maintain its necessary interconnection once these have been attained. For several reasons, however, this principle has not yet been sufficiently recognized. Knowledge as a whole, apart from the abstract sciences, still remains largely inchoate. It is empirical in the bad sense of the term—pragmatic according to the "rule of thumb" spirit, experimental on "hit or miss" methods; any "inherent necessity" therefore appears to be either totally absent or discernible to only a very slight degree, if indeed its actuality is not altogether denied as a philosophic principle. This incoherence and indefiniteness, further, must always pertain to the latest acquisitions of knowledge from the very conditions of its expansion; while "necessity" seems totally foreign to the very nature of spirit, especially in its affective and conational aspects; actions at least must be free, and the emotions unfettered. "Necessary truth", finally, is generally regarded as concerned merely with artificial abstractions far remote from concrete realities.

But although this attitude is perfectly natural during the early stages of intellectual progress, it nonetheless altogether misapprehends the true nature of knowledge and of mind. We have found already that the rigid distinction almost universally drawn between *a priori* and *a posteriori* truth is never an absolute distinction. It is rather always a matter of degree, so that "the *a priori* is merely what comes clear and connected out of the mass of the *a posteriori*". What is *a posteriori* to the student is *a priori* to the mathematician, and becomes increasingly so to the student himself as he advances; and every competent expert and true artist works in a realm which is to him *a priori* through and through—all his methods "clear" and all his subject-matter "connected".* It is true of course that these favourable conditions prevail within very

* *Cf. ante*, p. 261.

limited spheres—only in the abstract sciences, or practical fields of activity which are comparatively narrow and specialized. But this is simply the consequence of the infinite complexity of the universe which the human mind is ever striving to comprehend ; only the relatively simplest phenomena therefore exhibit that " clearness and connection " upon which the *a priori* character of truth depends ; and the requisite simplicity, again, can be obtained solely by abstraction. Nevertheless abstraction is only the proximate, and never the ultimate goal of thought ; even the abstract sciences themselves are rapidly becoming more and more concrete—richer in their content and more complex in their distinctive methods. It is inappropriate, for instance, to describe the modern theory of relativity, in all its applications to the physical universe, as merely " abstract " ; this is true to some degree of the separate formulæ and equations involved ; but taken in all its complexity, the principle may quite legitimately be called concrete.

2. The ultimate aim of mind is thus on the one hand abundance and variety of content, and on the other the construction of the system or " form " which alone is relevant to this content ; and it is obvious that the relation between these two ends must vary with the stage which has been attained.* It is often disputed whether intellectual activity is a discovery of a pre-existent order, or the creation of a new one. The truth is that it always exhibits both characteristics. For the system within which the content falls is really determined by that content itself ; the richer the content therefore the more readily is its relevant system discerned ; which means that the structural order increasingly manifests *itself*, so that the finite mind becomes as it were more and more a " sleeping partner " or mere spectator, except insofar as the increasing volume of facts throws a heavier burden on its capacity. Whenever on the other hand there is a poverty of detail—as always in the initial stages of any investigation—the mind must be incessantly active, endeavouring from the scanty material

* I may refer to a fuller treatment of " form and content " in chap. iii. of my *Philosophic Basis of Moral Obligation*.

at its disposal to construct or "create" an order which, owing to the very conditions of the situation, it cannot perceive. This is true equally in thought, art and action. But it is a matter of universal experience that the farther any great work of the mind is carried the stronger becomes its tendency to complete *itself*; a sustained logical argument leads to only one conclusion, just as a profound tragedy has but one artistic ending; a fine picture determines its own proportions, and a splendid building its symmetry, just as a critical occasion in life or history imperatively demands a certain line of action. The principle is throughout one and the same; certain given conditions necessitate their own continuance or completion along certain definite lines; and this principle is not invalidated, but is rather confirmed, by the fact that altered conditions lead to changed consequences.* One political party or one statesman will meet a crisis in a different way from another; nevertheless the course pursued is dictated by personal character or historic tradition in such a way that the ruling conditions, taken as a whole, always determine their own further development; and, once again, we are concerned throughout with the essentially free activity of mind, or spirit, or personality, either on the individual or the social level.

All such instances then have the same significance. Each manifests, in its own distinctive way, both wholeness and necessity; or, more truly, the necessity which is dictated by wholeness, for these are simply aspects of the one reality. The categorical moral imperative is thus paralleled by a logical rigidity which is nonetheless flexible, just as the ether is at once infinitely dense and extremely tenuous; while both are akin to the freedom of art which posits its own eternal principles. Thus the nature of finite mind is paradoxical. It exhibits both the false and the true infinity; its task being endless, it is infinite in the wrong sense;† but since it ever tends towards self-completion, it is truly infinite also.

* "The distinction between thought and conation is surely superficial. All thought is the self-maintenance of universals, and every universal is on one side a conation" (Bosanquet, *The Nature of Mind*, p. 66).

† *Ante*, p. 290.

In accordance then with the principle of temporal ideality, Mind, emerging from Matter, is a real of a higher order, as in the ancient myth the goddess Aphrodite rose from the sea ; and like all reals, it is a focus or centre of the universal activity—one factor of the advancing phases of the world which are created by its incessant transformation.* We have seen that the universe is operative in every phase alike ; whence it follows that the universe, again in its wholeness, is active in and through every distinct real. Every electron, as Whitehead has argued, is " ingredient " throughout the universe, just as every part of Space-Time is influenced by all its other parts.† But at the same time the form taken by this dynamic manifestation varies with the character of the real itself. The higher this becomes in the scale of being, the more do other reals influence it in their own distinctive individuality, instead of acting upon it *en masse*. The other planets *e.g.* act on the earth simultaneously ; but they impress the mind of the astronomer as separate and distinguishable. The essential function of mind as such, that is, is first to individualize the reality which forms its content, and then—at a still higher level —to comprehend these individualized existent elements within the unitary system to which they really belong ; ‡ thus perception individualizes, while conception constructs ideal systems which become more and more comprehensive as thought advances.

So far therefore as speculation may venture to solve the riddle of the universe, it is here that we discern the *raison d'être* of the evolution of mind. I have suggested at the beginning of this chapter that in Life the organization of matter attained its highest possible level ; and throughout the entire range of physical phenomena all that occurs is that every real transmits some measure and mode of its *influence* to other reals ; but no real can affect others in its own complete nature, and purely as *itself*. If therefore this is to take place—if not merely some form of influence

* *Ante*, p. 298. † *Ante*, p. 282.

‡ In its psychological aspects this becomes the differentiation of the presentation continuum of Ward, and its later integration.

is to emanate, but if every physical real is to act as it is and in its entire being—some super-physical medium and mode of action are plainly necessary; and these we find in Mind. I do not here suggest that universal evolution is purposive; I am merely advancing a possible *rationale* of the course which it has actually taken. With the advent of mind (at the perceptual level) physical reality acquires a double mode of existence, and therefore—since all existence is dynamic—of action and influence; for it first of all exists *qua* the physical world, and then exists also—over again as it were—in intimate alliance with mind within its own higher world. The content of mind as perceptive, in other words, is the physical universe *qua* universe. This is of course nothing more than the standpoint of Direct Realism, but it is here considered in its epistemological aspect, not its ontological; and this then yields the true implication of the principle of logical ideality. The material world constitutes the content factor of mind, and so acquires a status and influence within a sphere higher than itself, the basis of which it has itself provided.

3. Mind is thus never a realm wholly separate from matter; on the contrary it is in a certain sense true to say that mind, from the side of its perceived content, is matter that has attained to a higher level of being, insofar as it comes to exist as the object of perception, as well as in its materiality; although this must not be taken to mean that mind is nothing more than matter, or that matter itself becomes conscious. The essential point is that this higher mode of existence is never passive or static, but is always dynamic. For the mind, as a whole including perceived content as one of its elements, is always conative and active; * in response to the stimuli received from this content it incessantly modifies and controls it; and thus —and only thus—the material world indirectly modifies itself in ways which are altogether impossible on the purely physical plane.

In the earliest forms of mind the natural world is always the dominant factor, in the sense that the psychic processes

* *Cf. ante*, p. 311, n. *.

are to a great degree reflex. But the further development of specifically subjective content—the organization of desires and purposes into definite systems—results in the increasing independence of mind, although even in the higher animals the whole conscious life is orientated towards the course of inanimate Nature ; and since the entire evolution is itself a perfectly natural process, insofar as it is causally determined throughout and conforms to natural laws, it manifests once more the " ideality " of the physical world—its comprehension, as an indispensable constituent, within a wider whole than itself.

Realism, however, is concerned with the implications of thought and knowledge in this connection ; and it may be noted, in the first instance, that the evolution of the human mind is but a further continuation of the earlier entirely natural process. Nowhere is there any loss of continuity, nowhere any gap or hiatus, despite the profound contrast between the lowest and the highest stages. Throughout its whole ascent mind maintains its direct connection with reality, so that all experience is, in principle, the experience of reality ; and reality, to begin with, is directly present to perception as the physical world. But the super-perceptual levels of mind are equally the experience of reality, and—to begin with—of the same physical reality as is given in perception. This is not so fully recognized as it ought to be ; the belief that thought, as such, can deal only with unreal abstractions is much too familiar. The truth rather is that thought apprehends continuously more and more of the one real whole, and that within this whole the physical world always constitutes an essential element, thus once again revealing a deeper aspect of its inherent ideality.

But when properly interpreted, the fact that thought is concerned with abstractions implies that consciousness is always confronted by some type of totality. For extreme abstraction always demands prior discrimination ; it is possible only after the determination of the *exact nature* of the factors to be abstracted. As is evident from the methods of logic and mathematics, this precision is of the utmost

importance and difficulty; but it obviously involves analysis, and this, again, must always operate upon a totality whose character has not yet been determined with sufficient accuracy. Analysis and abstraction are thus plainly indispensable to the advance of thought; they are the only means whereby the mind can apprehend the complex universe. Nor are the products of the abstractive process in themselves unreal or illusory or false; they become so only when they are severed from their original matrix within the whole and maintained in an unnatural isolation. Apart from this, and regarded simply *as* elements, they are essentially real—real factors of the real whole; although at the same time the highly specialized investigations of modern science result in a lack of connection which can be compensated only by the comprehensive survey of philosophy.

That Hegel should have emphasized all these aspects of the activity of thought is to be expected; but it is curious to find Bergson occupying the same standpoint, without appearing however to realize its true implications. "Philosophy," asserts Hegel, "never can get on without the understanding. Its foremost requirement is that every thought shall be grasped in its full precision" *—the "understanding" here denoting what is now often called the "scientific" attitude, with its incessant demand for clarity and vigorous protest against vagueness—a protest repeatedly anticipated by Hegel himself.† Similarly Bergson —"Science always tends to mathematics as an ideal" ‡ —a principle which may be extended to knowledge as a whole—to History, Ethics, and Æsthetics; for all these cultures alike pursue the same end—the expression of their own truths as fully, but also as *definitely*, as possible; and the logician and mathematician do nothing more. They certainly succeed in their aim far more completely than all other investigators; but this is merely the inevitable result

* *Logic*, sect. 80.

† "The merit and rights of Understanding should unhesitatingly be admitted. Apart from Understanding there is no fixity or accuracy in the region either of theory or of practice" (*Ibid.*). *Cf.* this entire lengthy section on these points.

‡ *Mind-Energy*, p. 70.

of the relative simplicity of their subject-matter; and Bergson's further conclusion that science or the "intellect" always yields only an irremediable distortion of reality is at once disproved by a passage which immediately precedes that just quoted. "Modern science", he asserts, "is the offspring of Mathematics, begotten on the day when algebra had acquired sufficient force and pliability to be able to enfold reality"; but if this is to be understood literally we are faced with the question why, if all intellectual operations pervert the real, algebra and the allied sciences can in any way "enfold reality".

The truth is that the analytic activity of thought is both the indispensable prolegomenon to all the higher forms of knowledge and the means whereby the content of this knowledge becomes endowed with its characteristic necessity. For while perception is undoubtedly the experience of physical reality, it is still limited to the most readily discerned qualities of that reality—to those patent attributes which are sufficient to subserve animal life and practical needs. Perception is a rude and primitive instrument of mind comparable to the tools of primitive man.* Objects are cognized as units whose actual complexity is disregarded; and this is equally true of their relations, both external and internal. For analysis and abstraction are at bottom concerned with relations; they may almost be defined as the continuous discovery of new relations; every factor descried within the original field is at the same time cognized as related both to the field as a whole and to the other separate entities within it. As Ward maintains with regard to Psychology, there is always continuity, and the emergence of additional elements is but a further modification of the persistent continuum. But continuity which is thus relational constitutes totality or—more truly—wholeness; for the object of thought, which is at the same time real existence, is neither the elements nor their relations taken apart from one another, but rather these elements *in* their relations; and the relations themselves, in order to be properly comprehended, must be regarded in their degrees

* *Cf.* Kemp Smith, *Prolegomena*, p. 33.

of importance as manifested by the range of their application ; and this implies, in a word, systematic, and therefore necessary, wholeness. The full detail of its intimate structure, obviously, can be determined only by carrying its analysis to the farthest possible limits, a task which falls to mathematics and logic, concerned as these are to a great degree—but by no means exclusively—with the ultimate factors and ultimate relations of all reality.* But as soon as this process has exhausted its possibilities, the innate tendency of thought at once reasserts itself, as is obvious from the character and content of modern logic and mathematics themselves. Thought turns from analysis to synthesis, although the nature of its synthetic operations is necessarily affected by the prior analytic research. The whole, therefore, which is finally comprehended is at once new and old ; it is still the original whole, but transformed, reconstructed, and illimitably enlarged in such a way that the tendency of thought is always towards necessary truth, despite the errors which must attend all the activities of finite mind, simply because it is finite ; error is the wound it receives in its grappling with the infinite, as in the old Hebrew story the patriarch was lamed after wrestling with the angel.

These considerations may be summed up in two further passages from Hegel, while at the same time they elucidate the meaning of "ideality". "Thinking reason which is no longer abstract grasps the truth as something *concrete*, as fullness of content, as Ideality, in which determinateness—the finite—is contained as a moment. . . . Ideality means that definite external existence, conditions of space, time, matter, this separateness of parts, is done away with in something higher ; in that I know this external existence, these forms of it are not ideas which are mutually exclusive, but are grasped together".† On this two comments, from

* The general problem of relations is far too wide for more detailed consideration here. I need add only that we must have both relata and relations, although their status is often interchangeable, in accordance with the context. Similarly, whether relations are external or internal depends on the extent of the system we are dealing with in any given instance.

† *Philosophy of Religion*, vol. i. pp. 30, 84.

the realistic standpoint, may not be superfluous ; the phrase " done away with " here means not destroyed, but transcended or absorbed ; while it is " external existence "—that is the material world—which is known throughout the entire advance. But it becomes known more deeply and more completely, so that the vague disconnection which characterizes the earliest perceptual level steadily gives way to that necessary interrelation of infinitely diverse yet definite elements which forms the objective content of all scientific or conceptual thought ; and here it must be remembered that the perceived world of civilized man is itself to a very high degree unconsciously conceptual, insofar as the form of his experience has been determined by all modern science ; while perception proper, in its strict psychological sense, is found only in animals or savages or children, and must not be applied to the highly complex mentality of educated adults ; it is perhaps best exemplified in Wordsworth's " Peter Bell " :

> A primrose by a river's brim
> A yellow primrose was to him,
> And it was nothing more.

4. To pursue all the implications of the situation thus outlined would obviously necessitate a complete system of philosophy ; but I am here concerned only with its bearing upon the further development of modern realism. There is some danger that the protest—in itself thoroughly justified—against subjectivism may betray realists into too marked a separation of thought from real existence ; and here again the distinction already so often emphasized between mental activity and the object of consciousness becomes of vital importance. For while the *process* of thinking is certainly subjective, it does not therefore follow that the entire *content* of thought is also subjective, any more than perceived content is subjective because perceiving itself is so. Some elements of thought-content are indeed subjective, but in principle this content is fully as objective as is that of perception ; and even its subjective factors are always obtained by abstraction from this prior objective

basis or source. The actual content of thought therefore is always reality under one or other of its many aspects; and when thought takes the form of natural science its object remains the material world of sense-perception still more truly—because more profoundly—apprehended; this deeper truth then manifesting the dual attributes of increasing wholeness and necessity.*

There remains, however, a final but supremely important consideration—the implication of mind itself with reference to the nature of the Universe; and here another serious risk threatens realism—the tendency to interpret mind in the light of its limitations instead of its potentialities. For while all the processes of the human mind betray its inadequacy, still this inadequacy is inevitable, since it arises from the very conditions of experience. The human mind is conditioned by those severe space and time limitations which spring from its attachment to or location within the body,† and which it can surmount only by means of images and concepts subject to all the idiosyncrasies of the individual. But the essential point is that in spite of these formidable difficulties thought maintains its unbroken "relation with the entire real universe"; and this in such a way that one and the same necessary wholeness pervades and controls equally the schemata of logic and the structure of the real. Thus the nature of subjective mind illuminates the nature of objective reality; and every fresh expansion of thought proves more and more conclusively that the distinction between subjective and objective is but a distinction within a wider unity—a difference within a deeper identity. All human experience, in short, is in principle rational throughout, and the further it develops the more is this inherent rationality attained alike in thought, in

* "Truth is the form which reality assumes when expressed through ideas in particular minds. . . . Truth is reality as it makes itself known through particular minds in the form of ideas. . . . Thought is, in principle, in relation with the entire real universe, which it may approach from any starting-point"; the "entire real universe" here including the material world as directly perceived (*Implication and Linear Inference*, pp. 148, 150; *Mind*, vol. xxxi. p. 235).

† This is true of any theory of the relation between body and mind, and whether the mind itself is spatial or not.

action and in emotion. But this rationality springs from the intercourse between the mind and the world ; the reason within therefore originates from a Reason without ; or more truly, it is the one immanent Reason that manifests itself first in the objective world and—because of this—equally within the subjective mind. If it is contended that error is here ignored, the obvious reply is that error is characteristic not of mind *as mind*, but only of mind *as finite* ; and so far from being native, it is rather foreign and hostile to mind. For the real meaning of " finite " is imperfect or incomplete ; and the whole tendency of normal experience is to destroy error in the realm of thought, and evil in the sphere of action, in exactly the same way that a healthy body rids itself of harmful germs. It is thus that mind reveals its true character, and in so doing attains its proper infinity ; mind is the offspring of the universe, born in the purple.

It is here that we find the one central principle of the Idealism of Hegel and of Plato—in the universality or immanence of Reason, manifested as the dynamic necessary wholeness of reality—the Idea of the Good, the Idea as such, the Absolute Object.* Thus reality is infinite in the sense of being self-complete, and perfect as being the unchanging source of inexhaustible change. It is from this standpoint that modern realism must view the physical universe—a universe which is certainly directly present to perception, but which can be truly apprehended only by thought.† Thus " what is actual is reasonable, and what is reasonable is actual "—actuality and rationality are, at bottom, one and the same ; and in taking up this attitude realism expands into a more profound idealism, though in so doing it remains none the less a true and proper realism ; while the further characterization of reality as the " Idea " constitutes the subject of still further inquiry. Is it then most truly regarded as an experience, a self, a personality, a Deity ?—these are questions which must be dealt with by the realistic-idealism of the future.

* *Cf. ante*, pp. 280 *sqq.*, and Hegel's *Logic*, sect. 193.

† *Cf.* " the world as it is revealed *through the senses* is the manifestation of an intelligible order " (Nettleship, *Plato's Republic*, p. 231 ; my italics).

This principle, however, has been misapprehended by some recent critics of Idealism. I have already referred to Perry's assertion that "idealism rests fundamentally upon a theory of *knowledge*. The supremacy of spirit is argued from the theory of the priority of the knowing consciousness itself. . . . God is enthroned as the master-knower".* But this charge can be brought against neither Plato nor Hegel, whose actual position is thus presented by Wallace: "all true being must be looked on as a real unity and individuality, must be conceived as manifesting itself in organization, must be referred to a self-centred and self-developing activity—the fundamental thesis of idealism".† Here there is no reference whatever to knowledge or to a knower as the ultimate ground of real being; we find simply those attributes—the necessary but sufficient attributes—which have been emphasized throughout the present chapter—unity, individuality, dynamic organization. This is confirmed by Taylor's more recent study of Plato; "he did not hold that God's knowledge that things are relationally ordered is the logical *prius* of their being so ordered".‡ The "God" of Plato, indeed, is almost purely mythological. "In the *Timæus* the supreme power in the universe is described in a personal way, in the *Republic* it is described in what we call an abstract way. Of the two ways no doubt Plato thought the latter truer. . . . Plato in the *Republic* does not call this principle God but form"; § while for Hegel God is never the "master knower" who, as such, is the presupposition of the universe, but is rather that universe itself. The Hegelian God is "the Absolute object, the objective world as a whole. . . . The Absolute comprehended as concrete is the true God. . . . The development of God in Himself is the same logical necessity as that of the Universe".‖

Whether or not we agree with this presentation of the

* *Present Philosophical Tendencies*, pp. 113, 119.
† *Hegel's Philosophy of Mind*, p. 116.
‡ *Proc. Arist. Soc.*, vol. xvi. p. 272.
§ Nettleship, *Plato's Republic*, pp. 232, 233.
‖ *Logic*, sect. 193. *History of Philosophy*, vol. iii. p. 4. *Philosophy of Religion*, vol. i. p. 114.

Divine Nature, it is clear that it affords no basis for any criticism such as Perry advances.* For the truth is that the idealistic principles of Hegel formed, for him, no presupposition, and hardly indeed a theory ; † they were simply the expression of a fact which he held to be patent to serious speculation—the presence of order, of organization, and—in that sense—of rationality, throughout the Universe ; and it is a fact which finds its weightiest evidence in the methods and conclusions of modern science.‡ One of its best known exponents, who is at the same time a realist, has recently asserted in this connection that " there is not enough mind to go round ".§ If by " mind " we mean merely the subjective mind of the individual investigator, no doubt this is as true as it is witty ; but if we read into it all that the human mind, despite its imperfection and infirmity, discovers and implies, then modern realism must range itself with the classic idealism of Plato and of Hegel.

* *Cf.* Pringle-Pattison, *The Idea of God*, p. 199. " Any direct argument from the conditions of knowledge to the theorem of an All-Thinker and of the universe as the system of his thought " is fallacious.

† *Cf. ante*, pp. 260, 267.

‡ *Cf. ante*, p. 260. *Cf.* " while all the phases in the development of explicit self-consciousness are *rational*, they are not all *mere Reason*. . . . Morality and Religion are rational, but they are not Reason as such " (Baillie, *Idealistic Construction*, pp. 260, 261).

§ Whitehead, *Proc. Arist. Soc.*, vol. xxii. p. 131.

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